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## Public Health\*

PRESIDENTIAL ADDRESS

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IN presenting the presidential address to the twenty-ninth annual meeting of the Canadian Public Health Association I should like, first of all, to extend to you all a hearty welcome. Our meetings mark definite milestones in the progress of the Association, and I am glad to see the interest so well sustained in these trying times.

May I, too, take this opportunity of thanking the members of the Association for the honour conferred upon me in my appointment as presiding officer. I can assure you I deeply appreciate this gesture of confidence.

Now, I do not propose to make any lengthy address. Someone reminded me the other day that one of the virtues of President Lincoln's Gettysburg speech was that it was short. In one respect, then, I shall emulate that great American statesman. My remarks will be short.

Many of our members have watched the progress of this Association since its inception in 1910, and are quite familiar with its original objectives. We have watched the organization evolve into a complicated structure. At first our concern was mainly the provision of some medium for uniting those engaged in health administration in order that they might get together to discuss problems and gradually make uniform practices in connection with the controlling of communicable disease, and the diffusion of the knowledge of sanitation in all its branches. As time went on, sections of the Association were developed until now most of the branches of preventive medicine are represented in our organization. In 1928 the objectives of the Association were enlarged to focus attention upon the development of trained personnel to occupy administrative positions, and of

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trained officers for the practical application of the principles underlying preventive medicine. The original aim of our Association was mainly directed toward the education of the public by both direct and indirect methods; and in the year 1928 it was considered that this objective could best be reached by making it a professional society available to all those engaged in public health work. No doubt the underlying principle in this change involved the policy that well-trained public health workers could, by personal contact and from the public platform, spread the gospel of public health much more satisfactorily and efficiently than by depending upon indirect methods radiating out from a central body.

Supplementing this general policy our Association has maintained the publication of a monthly journal which has served the important purpose of keeping health personnel throughout Canada informed of the newer developments in preventive medicine and the newer practices in the application of these findings. This Association has every reason to be proud of its journal, which is making a most important and definite contribution to the progress of health administration in Canada.

When it has been decided to build an intricate and complicated structure over a river we demand the services of a capable engineer; if we propose to erect a building for certain specific purposes, we need the services of a qualified architect; when we wish to apply sound scientific principles in preventive medicine, we require trained personnel. The practice of public health is a professional activity. We can hope to maintain public confidence only through the proper application of practical public-health procedures by thoroughly qualified persons who know what is required and who know what to do, in order that adequate results may be obtained. I need only add that the soundness of this policy is attested to by the very generous assistance which this Association has received from the Canadian Life Insurance Officers Association. The fact that such an astute body of men is willing to co-operate with and work with the members of this Association in the development of policies is evidence in itself that the Canadian Public Health Association is operating upon a sound foundation.

I sometimes wonder if we, as members of this national body, have thoroughly grasped what the term "public health" comprises. I know that we have made wonderful strides in the control of communicable infection; much research work has been done to assist us and much further research has been conducted in the application of the principles that have been laid down. Have we, however, been too restrictive in the field which we consider "public health" should occupy? I do not mean in any sense that we should interfere with various professional bodies which are dealing with certain phases of human existence and welfare. I do mean, however, that I wonder at times if our health administrators might not have a very successful influence in co-ordinating the varying types of services that are being rendered, whether in a private professional capacity or in a voluntary capacity, in order to improve the welfare of the people from a health viewpoint. Sections of our organization already deal with housing and with mental hygiene, but how much effect on public health itself do the ordinary every-day

illnesses have, both as regards the individual and the community at large? To my mind there is some need for a co-ordinating factor between those practising medicine in a private capacity, those practising dentistry, and those practising the nursing profession, along with the health administration of the community. The three professions mentioned do unquestionably meet the problems in the first instance. To my mind an essential requirement is a very close co-operative bond between these professions and the health administration if real, tangible results are to be obtained. In other words, may I state that I feel the time is coming when a health administration should consider working through these professions as much as is practicable. While I am free to admit that I do not know just how this could be accomplished, yet I do feel certain that some way will have to be found whereby a very close association may be established. I do not mean that a fine spirit of co-operation does not already exist—I know that it does—but an assumption has persisted for many years that there is an artificial dividing-line between the two fields of the practice of medicine: that is, between the preventive and curative. Personally I am unable to define that line.

A glance at our morbidity and mortality statistics will indicate that heart disease, cancer and mental illnesses or deficiencies constitute one of the biggest problems we have in Canada today with regard to public health. I realize that the activities of our Association in promoting the proper control of communicable infections, the inspection and examination of pre-school and school children, with a proper follow-up in corrective measures, the application of preventive dentistry, all have a distinct bearing upon the incidence of heart disease, but in view of the fact this condition is so wrapped up in the multiplicity of infectious processes to which people are subject, with the strain and the emotional reactions and the high tension of our present-day life, one wonders just how far we can go, how far it is possible to go, in providing any corrective measures to deal with this problem.

Some of our provinces have undertaken a program of cancer control as a public health activity, and while preventive measures so far seem far removed from the actual problem, there is no question but that early diagnosis and early adequate treatment will have a distinct bearing upon the ravages of this disease.

In the field of mental hygiene there are many broad fields to cultivate and I think that this Association would do very well to stress the problems that are being met today in connection with mental illnesses. When we realize that dementia praecox patients occupy approximately one quarter of all the occupied hospital beds in this country, and that there are twice as many of these patients in hospital as there are of tuberculous patients in the sanatoria, we can visualize the extent of the problem. Research is required and the application of corrective measures to control any causative factors in the life of the individual throughout his pre-school, school and adult life is essential if any completely satisfactory results are to be obtained.

At the present time we are engaged in the prosecution of the war, which must be brought to a successful conclusion. At no period in our history have we faced such a gigantic problem. The whole structure of our civilization, all the

principles of freedom and liberty are at stake in this issue. It is our duty as a national body to further every activity within our power to assist our Governments in winning the fight. In other words, we must do our utmost to maintain a satisfactory state of health for the population of this country, in order that there may be adequate reserves to meet the losses which are bound to be sustained.

But what will be our task after the war is over? Will the difficulties which attended and followed the last war be the same difficulties we will meet after this one? No one knows, and we can only be prepared to do the best we can.

I indicated previously that one of our big problems relates to the public-health status of the middle age group of our population, and to my mind when the war is over, this, at least, will be one of our major difficulties. The question arises therefore as to whether or not we have the proper system of medical care to meet the health requirements of our population. Does the private practice of medicine meet the need on a fee-for-services basis if, as and when the services are requested by the patient? Does such a plan deal adequately with the conditions I have mentioned? In Western Canada and especially in Saskatchewan the people are attempting to secure medical services under a different plan and in many respects the arrangement is very successful. I leave this question with you: What action should be taken from a national viewpoint?

I have endeavoured in these remarks to stress one main thought. I have not tried in any way to determine what line of action should be taken to meet the situation outlined. I do feel, however, that the minds of the members of this Association will in time evolve a plan whereby the activities of our Association may be extended to accomplish something for the national welfare in dealing with those problems—mental and physical—which affect the middle age group.

Our program for this convention is a comprehensive one and various aspects of the subject I have mentioned here today will be discussed. I have no doubt that as thought is given to these matters we shall be able to evolve some suitable program to deal with them.

In conclusion, I should like, on behalf of the members of this Association, to emphasize the pleasure and privilege it is for the Canadian Public Health Association to meet in conjunction with the Manitoba Medical Association. The arrangement has greatly added to the interest and value of the occasion. I should like, too, to thank the various officers and committees for the excellent assistance they have rendered throughout the year.

The period through which we are passing is a most uncertain and difficult one. We can only take it a day at a time, and, as the poet Longfellow has so simply described it:

“Still achieving, still pursuing—  
“Learn to labour and to wait.”



# Commercialized Prostitution and Venereal-Disease Control\*

*The Results of Suppression of Commercialized Prostitution on Venereal Disease in the City of Vancouver*

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ALTHOUGH many years have passed since modern medical science provided the means whereby the venereal diseases might be effectively reduced, the problem of their control has not yet been realistically dealt with in Canada. While among the communicable diseases, smallpox, typhoid fever, diphtheria, and tuberculosis have shown striking reductions in incidence, the scanty statistical data related to venereal infections have not shown any clearly defined diminishing trend. Available figures would suggest an incidence considerably above that of Great Britain and the Scandinavian countries where brilliant results have been obtained in control programs.

It is not difficult to understand why the venereal diseases still constitute a major health problem in Canada. The factors related to their acquisition and transmission are complex. They are rooted in defects of human behaviour and in inadequacies of our social and economic life. Prudery, ignorance, and defeatism on the part of the public have in the past presented obstacles to the application of the usual methods of control utilized by health departments against a communicable disease. In addition, a great barrier has been the active opposition of a widely ramified vested interest which has exploited venereally infected young women in the illegal business of commercialized prostitution. It is with this latter factor that this presentation is concerned.

The complex problem of venereal-disease control must be approached from as many directions as there are problem facets. Each effort will play its part in reducing the menace. The provision of adequate diagnostic and therapeutic facilities is essential. Routine pre-marital blood tests in partners contemplating conjugal union will prevent the innocent syphilitic infection of many young married women. Routine serodiagnostic blood tests for syphilis before the fifth month in all expectant mothers, followed by weekly treatment where infection is found, will wipe out prenatal syphilis. The suppression of quackery is an important part of any program. These and others are all essential approaches to the problem. Fundamental, however, to the effective control of any communicable disease are the measures directed toward finding the source of the infection and making the source as inaccessible to the public as possible. From

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the standpoint of sound public-health method the control of the venereal diseases constitutes no exception to this basic approach. It is this essential phase of control which has been largely overlooked in Canada. The fact that this is so is evidenced by the relatively unhampered existence of a prolific source of fresh venereal infections in the form of widely spread, illegally operating commercialized prostitution.

#### COMMERCIALIZED PROSTITUTION

Commercialized prostitution is the illegal exploitation of venereally diseased young women in bawdy-houses. It is a purely mercenary business intimately associated with the criminal elements of society in which the more evident exploiters are madames, pimps, and procurers. The profits emanating from this illegal business, however, do not stop with these exploiters. The monetary streams in their diverse ramifications reach persons so remote that their participation in the business is only recognized by their indignation when the source of profit is disturbed by the activity of a health department. This, then, briefly describes the exploiter. The exploited are physically attractive young women who represent the merchandised product. As in any business, volume is an important factor in creating lucrative monetary returns. The merchandise must be kept fresh and attractive and this entails the constant procurement of new young women from the ranks of the unemployed and the less well remunerated occupations and the discarding of worn-out merchandise to add to the already large volume of street walkers and other prostitutes who work on their own. This is the purely monetary side of this illegal business and as such is not a direct problem or interest of a health department. In this unsavoury commerce, however, there is inseparably associated a serious public-health problem. In this illegal business there lies a prolific source of fresh venereal infections. This fact has long been recognized by public health authorities. Rosenau (1) has considered it so important in the problem of venereal-disease control that he writes as follows: "Any sanitary measures taken for the prevention of venereal diseases which do not include some method of handling the problem of prostitution are doomed in advance to failure, since they will ignore the main source and root of these diseases." Flexner (2) in his monumental study on "Prostitution in Europe" came to the conclusion that: "It is everywhere purely mercenary, everywhere rapacious, everywhere perverse, diseased, sordid, vulgar, and almost always filthy." Numerous are the other authorities who support these statements. Indeed one is impressed with the unanimity of opinion among experts regarding the public health menace which commercialized prostitution constitutes.

#### *The Criminal Code of Canada and Commercialized Prostitution*

The legal basis for effectively dealing with commercialized prostitution in Canada is to be found in sections of the Criminal Code dealing with procuration, living off the avails of prostitution, and disorderly houses. Of these sections, those relating to bawdy-houses are of particular interest in that they contain the means whereby the exploiters of diseased young women in bawdy-houses may

feel the restraining effect of gaol sentences and the profit-erasing influence of heavy fines. These sections should be known to all health officers. They are as follows:

*Section 228. Found in a disorderly house.* Everyone who, without lawful excuse, is found in any disorderly house shall be liable on summary conviction to a penalty not exceeding one hundred dollars and costs and in default of payment to two months' imprisonment.

2. Any one who, as landlord, lessor, tenant, occupier, agent or otherwise, has charge or control of any premises and knowingly permits such premises or any part thereof to be let or used for the purposes of a disorderly house shall be liable upon summary conviction to a fine of two hundred dollars and costs, or to imprisonment not exceeding two months, or to both fine and imprisonment.

*Section 229. Keeping disorderly house.* Everyone is guilty of an indictable offence and liable to one year's imprisonment who keeps any disorderly house, that is to say, any common bawdy-house, common gaming-house, or common betting-house, as hereinbefore defined.

2. Any one who appears, acts or behaves as master or mistress, or as the person having the care, government or management of any disorderly house, or as assisting in such care, government or management, shall be deemed to be the keeper thereof and shall be liable to be prosecuted and punished as such although in fact he or she is not the real owner or keeper thereof.

3. Everyone is guilty of an indictable offence and liable to a penalty not exceeding one hundred dollars and costs and, in default of payment, to imprisonment for a term not exceeding twelve months, who is an inmate of any common bawdy-house.

4. Any one who has been convicted three or more times of any of the offences mentioned in subsections one, two and three hereof shall be liable on the third or any subsequent conviction to imprisonment for a term of not less than three months and not exceeding two years.

5. If the landlord, lessor or agent of premises in respect of which any person has been convicted as the keeper of a common bawdy-house fails, after such conviction has been brought to his notice, to exercise any right he may have to determine the tenancy or right of occupation of the person so convicted, and subsequently any such offence is again committed on the said premises, such landlord, lessor or agent shall be deemed to be a keeper of a common bawdy-house unless he proves that he has taken all reasonable steps to prevent the recurrence of the offence.

It is alarming to learn that, in spite of the voice of public-health authority and the provisions of the Criminal Code, venereal-disease-riddled commercialized prostitution continues to flaunt the law and spread infection throughout most of the larger centres of population in Canada. Their disease-dispensing activities have from time to time been temporarily interrupted by moral or political crusades, but in few instances have health departments attempted to carry out their duty to the public as trustees and guardians of their health by applying epidemiological weapons to this obvious source of venereal disease and by recommending effective law enforcement.

#### *Bawdy-House "Propaganda and Plays"*

There are a number of reasons why health departments, in spite of the results obtained in the Scandinavian countries (3, 4), in spite of the League of Nations "Report on Abolition of Licensed Houses" (5), and in spite of the deliberate opinion of public-health leaders including Parran (6) and Rosenau (7), have failed to wipe out the source of disease emanating from illegally operating commercialized prostitution. Active, aggressive leadership on the part of health

departments in enlightening the public has been lacking. The subtle propaganda of the bawdy-house interests has been permitted to permeate public opinion until in many instances well-meaning citizens in their crass ignorance of the truth unwittingly give vocal support to that which is undermining public health, and by their utterances they facilitate the spread of venereal disease and seal the doom of many of their fellow-citizens.

Any attempt of the health department to advocate the suppression of commercialized prostitution as provided for by the Criminal Code immediately finds the vested interest dragging across the public's path the hoary, stock-in-trade, red herrings of "spreading the professional prostitutes and their disease throughout the city" and "the endangering of the chastity of decent women and young girls by assault and rape" and "the necessity of providing facilities for rehabilitating the prostitutes before putting teeth in the law and closing the houses". The motives behind this fallacious propaganda have long been known to health authorities. The public does not realize that "spreading" is actually beneficial in that it makes access to the sources of disease more difficult; it separates the exploited prostitute from her exploiters, and the aggregate number of male exposures to her disease in a given time when she is on her own is only a fraction of the number of exposures when lax law enforcement makes access of male patrons easy. Further, when they "spread" to more remote communities where health departments are not alert to their public-health responsibility and the Criminal Code is flagrantly violated, they create a glut on the market in this locality and thereby the need for procurement of new prostitutes is reduced. At these distant points physically attractive young women are protected from the procurer. To complete the exposure of this fallacy, it is ludicrous to imagine that commercialized prostitution in any community is localized to a segregated area or ever can be. It is always "spread" even while the vested interest would lead the public to believe it to be nicely restricted to fixed abodes. Johnson (8), legal expert with the League of Nations Committee on Traffic in Women and Children, pointed out from personal investigation in Paris that, although commercialized prostitution was supposed to be "localized" to 5,000 licensed prostitutes, it was in fact "spread" to between 50,000 and 60,000 additional unlicensed ones. It is the same in every community where an illegal "red light" district is tolerated.

The myth of endangering women and children by assault and rape is empty of factual support in actual experience. The enforcement of laws directed against commercialized prostitution results not in an increase in assault but in a decrease. This nefarious business like all businesses must boost its sales. This it does by many direct and indirect means. Every illegally operating bawdy-house constitutes a centre of community aphrodisiac influence which builds up to unnatural proportion the desire of males of that community to expose themselves to the diseased products of the house. Pelouze (9) has pointed out that "in cities wherein prostitution has been almost abolished for a time there is a decrease and not an increase in sex crimes, particularly rape."

The "red herring of rehabilitation" represents an effort to forestall any

public demand for law enforcement. The danger in this propaganda lies in the fact that the demand for rehabilitation facilities is sound but the motives behind the demand are not. Rehabilitation of professional prostitutes is a most discouraging social task. Professional prostitutes are the last to wish for sympathy or rehabilitation. Their exploiters can usually find mutually profitable activity in distant communities and never linger long to cooperate in rehabilitation measures.

If these "red herrings" do not deflect public opinion, and law enforcement becomes temporarily an effective reality, bawdy-house interests produce two "plays" for public consumption. These involve utilizing to the fullest extent the nuisance value of the professional prostitute as a follow-up to the "spread" propaganda. Immediately there occurs the "play" of professional prostitutes posing as street walkers and suddenly making themselves a very obvious nuisance on prominent streets. Along with this the exploiters move some of their diseased products to residential districts and often deliberately near the homes of citizens whose cry of "spread" will be loudest and most effective in veering public opinion back to its tragic attitude of tolerance toward reestablishing the disease dispensaries in their former haunts. The public is not cognizant of the fact that effective law enforcement can force landlords and lessors to keep the madames and their diseased wares trundling from house to house until the profits are gone and the patrons give up in their attempt to find the constantly moving madame and her girls.

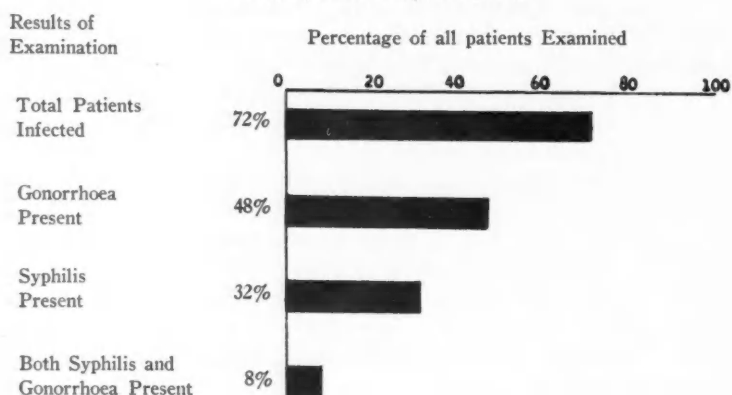
The essence of suppression of commercialized prostitution by effective law enforcement lies in its power to render this prolific source of disease *less accessible*. Accessibility is the key point. It is obvious that prostitution can never be wiped out, but it can be made more difficult and be resolved to a man-woman relationship which is not exploited commercially by third parties. Inaccessibility and freedom from commercialized exploitation will reduce prostitution materially and thereby venereal infection.

#### COMMERCIALIZED PROSTITUTION AND VENEREAL-DISEASE CONTROL IN THE CITY OF VANCOUVER

The paucity of medical literature in Canada dealing with this problem gives evidence of the scant attention which this source of venereal infection has received. In the Province of British Columbia with reorganization of the Division of Venereal Disease Control in October, 1936, on a basis adequate to deal with the menace of venereal disease to the public health, an efficient epidemiological service in the City of Vancouver soon unmasked commercialized prostitution in its true light as a source of infections. Upon the recommendation of the Provincial Board of Health and with the support of civic officials, the Police Commission, and the Vancouver City Police Department, a policy of more vigorous enforcement of law directed against commercialized prostitution was instituted. Disorderly houses which previously had flagrantly violated the law and spread disease were closed in February, 1939. In the first few months there-

**Incidence of Syphilis and Gonorrhoea among 65 Professional Prostitutes  
examined at Vancouver Clinic showing percentage infected**

*October 1, 1936 to August 31, 1940*



Results of Examination	Number of Patients	Percentage of Patients Examined
Total Patients Infected	47	72
Gonorrhoea Present	31	48
Syphilis Present	21	32
Both Syphilis and Gonorrhoea Present	5	8

FIGURE 1

after the bawdy-houses were almost completely closed; gradually, however, a number of these disease dispensaries began to operate surreptitiously and have continued to do so since, though to a lesser degree than previous to the institution of the policy of suppression. The volume of male exposures to this source of infection was greatly reduced.

It is the purpose of this presentation to show how the policy of more vigorous law enforcement has, as might be expected, resulted in improved public health. This study represents a cooperative effort between the Vancouver City Police Department and the Division of Venereal Disease Control, Provincial Board of Health. The City Magistrates and Prosecutors gave essential assistance in arrangements related to the examination of prostitutes. The task of instituting the policy of suppression and following it through entailed much extra work for the Morality Department. The men in this department worked in close cooperation with the epidemiological workers of the clinic in dealing with alleged bawdy-houses reported to them.

#### *Venereal Disease Among Professional Prostitutes in the City of Vancouver*

Before considering the effects of suppressing commercialized prostitution in the City of Vancouver, it is important to learn of the state of venereal infection among the prostitutes being exploited in bawdy-houses. Between October 1, 1936, and August 31, 1940, sixty-five known professional prostitutes were examined thoroughly in the Vancouver Clinic. This group did not include street walkers or other vagrant promiscuous women. The examination consisted of a detailed history, complete physical examination, and laboratory diagnostic procedures including Kahn and Hinton blood tests for syphilis, and urethral and cervical smears and cultures for the detection of gonorrhoea. The results are shown in figure 1. Of this group 72 per cent had venereal infections. Almost half of them had gonorrhoea in a communicable state and of those with syphilis half had their disease in a form which was communicable by the intimate contact of sexual exposure. Prior to the institution of the policy of effective law enforcement the incidence of infection among 38 of the women examined was 87 per cent. Following suppression a marked drop in incidence was noted. This was attributed to two factors: firstly, a migration of infected prostitutes from Vancouver and secondly an attempt on the part of the women to seek effective means of curing their infections principally by attending the Vancouver Clinic. Previously they had sought ineffective medical care which was directed at the superficial covering up of their disease rather than curing it.

An amazing revelation was made by the Provincial Board of Health in examining these women. In spite of their highly diseased state they were all able to produce recent "certificates" purporting to show their freedom from disease. These "certificates" were the laboratory reports on blood Kahn tests and smears for gonococcus given by the Provincial Board of Health to certain physicians who in turn passed them on to the professional prostitutes. Investigation revealed the deceit associated with obtaining these "certificates" and the matter was taken up by the British Columbia Medical Association. It was drawn



# New Male Patients admitted to the Vancouver Clinic showing monthly frequency distribution

July 1, 1937 to July 31, 1940

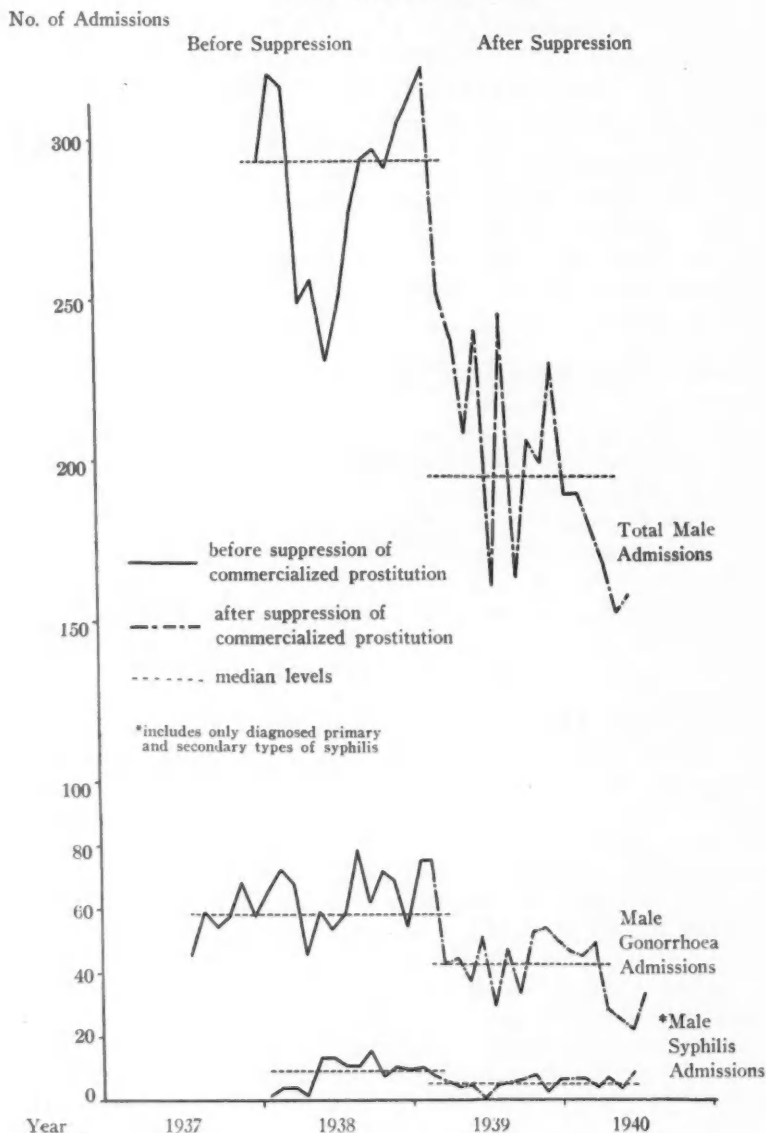


FIGURE 2

to the attention of all physicians that on purely ethical and scientific grounds *no physician should ever make a statement or give a letter or certificate which might be interpreted by a prostitute, or her exploiters or patrons, as evidence of her freedom from gonorrhoea or syphilis.*

Condemnation of unreliable medical reports concerning the existence of venereal infection came from the Bench of the Vancouver City Police Court. This and the assistance of the City Prosecutor finally stopped the nefarious traffic in medical "certificates". It marked the end of the deceitful and fraudulent means adopted by the vested interest of commercialized prostitution to give a veneer of apparent good health to their diseased products.

#### *The Professional Prostitute as a Source of Venereal Infection in the City of Vancouver*

It is obvious that the easily accessible exposure of male members of the population to so highly infected a source of syphilis and gonorrhoea as is found in the professional prostitute in the City of Vancouver must give rise to much new infection. The complete picture cannot be given till every case of fresh venereal disease is reported and the source named if possible. Self-treatment, quackery and the memory-effacing effect of alcohol add to the epidemiological difficulties encountered in securing information regarding sources.

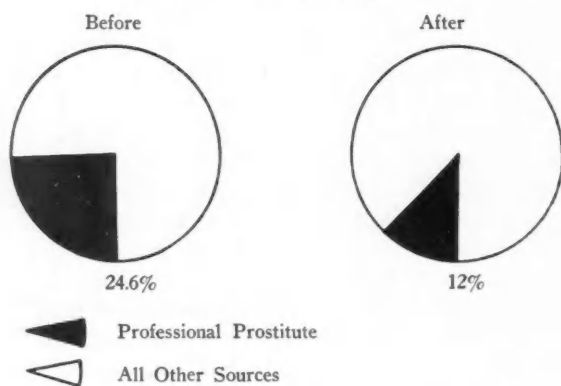
A part of the picture can be obtained from the records of the Vancouver Clinic. Prior to a policy of suppression, of 358 male patients admitted to this clinic suffering from gonorrhoea 88 or 24.6 per cent named professional prostitutes in illegally operating bawdy-houses as the source of their infections. Epidemiological follow-up substantiated most of these allegations. It should be pointed out that the male clientele of the clinic consists largely of indigents, relief recipients and a few in the lower-wage brackets. Their economic status is such that they are not able financially to expose themselves to the disease of commercialized prostitution to the same degree as are men in a better financial position. Among the latter it might reasonably be expected that the incidence of infection from bawdy-houses would be higher. This is supported by comparative annual rates of new notifications of syphilis and gonorrhoea in male occupations. These are highest in loggers, miners and fishermen, whose chief source of exposure is commercialized prostitution. Large as the amount of infection emanating from bawdy-houses seen at the Vancouver Clinic is, it undoubtedly is only a small proportion of the actual disease in the male population emanating from these sources. It is not necessary to emphasize that the ever-extending net of infections originating in these places spreads far and catches in its web many innocent women and children.

#### *The Influence of Suppression of Commercialized Prostitution on Venereal Infection*

The graphic portrayal in figure 2 shows the striking change in trend in total admissions of male patients at the Vancouver Clinic which immediately followed the effective enforcement of laws directed against commercialized prostitution. From a median monthly level of 292.5 patients for a period of 13 months before

**The Professional Prostitute as a Source of Infection among 458 New Male Patients with Gonorrhoea admitted to Vancouver Clinic before and after the suppression of commercialized prostitution was undertaken**

*August 1, 1937 to July 8, 1940*



Source	Before		After	
	Number	Per Cent	Number	Per Cent
Professional Prostitute	88	24.6	12	12
All Other Sources	270	75.4	88	88
Total	358	100.0	100	100

FIGURE 3

suppression, the level dropped precipitously to 193.0 for a period of 15 months after suppression—a reduction of one-third.

An analysis of the admissions shows a striking decrease in gonorrhoea, the median monthly level dropping from 58.5 before suppression to 43 after. There were 393 fewer male admissions for gonorrhoea for a 17-month period when access to bawdy-houses was made difficult than for a similar period when the houses were "wide open". If this striking reduction in disease, with all the cost it involves and potential danger to innocent citizens, has been noted in the clinic clientele, it is obvious that an even greater saving in improved public health among the larger remaining group of men has taken place.

Among the male admissions for primary and secondary syphilis a reduction of the median monthly level from 9.5 to 5 was observed. The public-health significance of this favourable change in those forms of syphilis which are most highly communicable cannot be overestimated. The difference between the total male admissions and those found to be suffering from gonorrhoea and syphilis in its primary and secondary stages consists of men suffering from late and latent syphilis, those found to be free from infection and a few whose examinations were incomplete. The reason for the precipitous drop in this group is accounted for largely by those found to be free from infection. Most of these men were admitted to the clinic because they had been recently exposed and were anxious to determine the status of their health. With closure of bawdy-houses they were not able to expose themselves easily and hence the necessity of examination did not follow.

The possibility that some factor associated with the institution of the policy of suppression might frighten male patients from the clinic was considered. Investigation of the new notifications by private physicians in Vancouver immediately following suppression did not show an increase as might be expected if this were true. Instead a drop coincident with that noted at the clinic is recorded.

In figure 3 is shown a comparison of professional prostitution as a source of male gonorrhoea in the Vancouver Clinic before and after suppression. Before suppression it accounted for at least 24.6 per cent, afterwards 12 per cent. The latter figure is evidence of the fact that the vested interest is still active but to a lesser degree. Continued vigorous law enforcement should further reduce this source of disease.

The policy of suppression was in force for six months before the outbreak of the war. The influence of the war factor on the statistics for this period would be insignificant as there was no great change in the status of males in the civilian population. After September, 1939, it appeared likely that this factor would have its effect in reducing the incidence of male admissions to the clinic. Statistical analysis has revealed a slight reduction in the median monthly levels since the onset of the war.

Newspaper publicity given to the highly diseased state of commercialized prostitution at the time of the institution of suppression and an effort to suppress soliciting in beer parlours had additional favourable effects which have assisted in the spectacular public-health improvement depicted.

## CONCLUSION

Of all sources of venereal infection, that found in commercialized prostitution is most obvious to health departments and yet it has consistently evaded the effective deterrent attention of both health department and legal authority. This illegal commerce has continued to reap its monetary gain at the expense of the degradation of young women and the public health. Public prudery is rapidly breaking down and a healthier public attitude will no longer permit this disease-riddled business to continue. The health departments of Canada cannot evade the issue. It is their duty to their communities to create public consciousness of the menace of the bawdy-house to the public health; to create a public demand for effective law enforcement which does not simply harass in a superficial manner the exploited diseased women, but which reaches the madames and her cohorts behind the scenes in the form of gaol sentences and heavy fines. As long as the exploiters can make profits, so long will commercialized prostitution last in a community and so long will needless venereal infection be spread. *Suppression of prostitution as provided for by the Criminal Code of Canada and as approved by health authorities seeks not to wipe out prostitution but to make it inaccessible and reduce it to a man-woman relationship free from the mercenary participation in this relationship of a third person.*

In the City of Vancouver a cooperative effort between health and law-enforcement departments has demonstrated the soundness of the policy of suppression of commercialized prostitution. The public health has been improved; an unsavoury commerce has been reduced; and perhaps an example for other communities has been set.

## SUMMARY

1. Professional prostitutes exploited illegally in commercialized prostitution in the City of Vancouver are highly infected with venereal disease.
2. Commercialized prostitution in the City of Vancouver is a prolific source of venereal infection.
3. The effective enforcement of sections of the Criminal Code directed against commercialized prostitution has reduced venereal disease in the male population in the City of Vancouver.

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# World Health during 1939

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WHILE there is no indication that there was any marked change in world health during the year 1939, the existence of war in so many countries has made it difficult to draw definite conclusions. It is impossible to estimate the amount of illness that occurred in China as a result of the Sino-Japanese war and this applies as well to Poland and invaded areas of Finland. During the year epidemiological records of countries actively engaged in war were not available and, in most instances, the maintenance of records was either wholly or partly disrupted. At this particular time we are concerned more with the possibility of epidemics following upon war than the actual incidence of disease caused by war.

While there was an improvement in regard to the prevalence of typhus in Europe, and particularly in Roumania and Poland during the early part of the year, it must not be forgotten that these countries are still the chief foci of typhus. Moreover, although there was a gradual reduction in the incidence of typhus in Yugoslavia, Bulgaria, Turkey and Palestine, there was an increase in both morbidity and mortality in Northern Africa, especially in Tunisia, Algeria and Morocco. In Egypt the incidence has been high for the last couple of years. Should those countries become involved in war, there would undoubtedly be an increase both in morbidity and mortality and with the possible dissemination of the disease to contiguous countries. Having this in mind, steps were taken by the Department of Pensions and National Health to provide typhus vaccine for troops and civilian populations. The situation in regard to the possible dissemination of typhus cannot be said to be encouraging.

The likelihood of the dissemination of cerebro-spinal meningitis is worthy of consideration. This disease, which fluctuates in cycles, is apparently again reaching its peak in Eastern Europe. This increase was apparent from 1936 onwards in Italy and Greece; in 1937 in Poland, Turkey, Roumania and Yugoslavia; and in 1938 in Bulgaria and Germany. In England and Wales the number of sporadic cases reported in the whole country for 1939 was higher than in previous years. There was a very sharp rise in Germany in 1939 and a very marked increase in the number of deaths. The morbidity rate for Germany as a whole was 7.5 in 1939 as compared with 2.7 in 1938. In Austria the increase in 1939 appeared to be without precedent in recent years, the morbidity rate being 15 per 100,000 of population. There has been no noticeable increase in the incidence of the disease during the year 1939 in Belgium, the Netherlands or the Scandinavian and Baltic countries. In the United States there was a decline in the number of cases.

Among the diseases which appeared in epidemic or endemo-sporadic form during the world war and whose incidence declined during the following decade, encephalitis lethargica is of particular interest owing to the fact that it appeared almost simultaneously in several combatant countries. According to the Matheson Commission, 52,000 cases were officially recorded in the world from 1919 to 1927, but it is considered that this figure is not a true indication of the number of cases as 20,000 cases of post-encephalitic Parkinsonism were identified in Germany alone and it was considered that the incidence in Poland was approximately the same as in Germany. It has made itself felt particularly in Northern Europe and notably in the Scandinavian countries. The viruses of encephalitis in various countries differ immunologically.

During the autumn of 1939 fairly important outbreaks of acute poliomyelitis were reported in various regions of Germany, Hungary, Switzerland and in the Netherlands, as well as in the United States, but on the whole in most European countries it did not reach the 1938 level except in Hungary and Italy. It was, however, decidedly more prevalent than in previous years in certain areas of the United States. In Germany the incidence of the disease during the summer and autumn was well above the median of the previous eleven years, but the number of cases recorded was lower than in 1938.

To gain an idea of the ravages that may be caused by louse-borne relapsing fever, it is necessary to recall the post-war epidemics in Eastern Europe and the epidemic wave originating in 1921 in French Guinea, which swept the continent from west to east in the territories of Equatorial Africa. In Eastern Europe, the epidemic of louse-borne relapsing fever followed that of exanthematic typhus. In Russia, where the first wave of typhus was notified at the beginning of 1919, the epidemic of relapsing fever did not appear until the end of that year but the number of cases in 1920 reached 400,000 in European Russia. During recent years the disease has been prevalent in North Africa and in epidemic form in the Niger Territory and the Anglo-Egyptian Sudan. The disease also appeared in Palestine, Trans-Jordan, Iraq, Iran, India, Turkestan, Indo-China and East China, in Asia, Peru, and the United States of America.

Apart from the endemic foci in India, China and Indo-China, no important smallpox epidemics were reported during the year. Smallpox mortality in India is always high. Although the number of primary vaccinations in that country has increased very materially during recent years, the number of deaths among children continues to be very high. It may be anticipated that there will be an increase in smallpox as the war spreads. The epidemic that occurred at Hong Kong in 1938, mainly among refugees from South China, was the worst in the history of that colony, the case fatality rate reaching 78 per cent.

The usual seasonal variations in influenza occurred in world countries, but the disease was not more virulent than in preceding years.

Although the reporting of dysentery is compulsory in most European countries, the statistics differ in accuracy from one country to another, or even from one area to another within the same country, according to existing facilities for diagnosis and treatment. The countries most affected are those which suffer



from typhoid infections to a great extent, such as the countries of Central and Eastern Europe and the Balkans. There was no indication of any definite increase during the year. The bacillary type of dysentery occurs in epidemic form and, consequently, with considerable variations in incidence from one year to another in most European countries.

Yellow fever continued to prevail during the year in endemic areas with the exception of Senegal, French Sudan and Dahomey, which have been reported free of the disease during the year under review. The endemic area of sylvatic yellow fever in Brazil progressed eastwards at the beginning of 1939 in the States of Minas Geraes and Rio de Janeiro, making its first appearance in the State of Espirito Santo where no fewer than 96 deaths had been recorded at the beginning of May.

Although a rapid decline in the incidence of cholera is usually reported from North China during the month of October, the disease persisted during 1939 in the towns of Shanghai, Tsingtao and Tientsin. Cases were notified in September and October at Hong Kong. Indo-China supplied a million cubic centimetres of anti-cholera vaccine for the treatment of the population of threatened areas in South-West China. An epidemic which began during the last week of June in Zabol Province, Iran, did not become extensive, the total number of deaths recorded during the first four weeks of the epidemic reaching 250. The usual seasonal increase occurred in British India except in Assam and Bengal. In the latter the number of cases was higher than the normal for a good year but did not reach that of a highly epidemic year. In Madras Presidency, the number of cases reported was low.

The situation with regard to plague remained unchanged. In the countries surrounding the Mediterranean, the only places where human cases of plague were notified in 1939 were Algiers and Tunis. In Egypt the disease was reported from January to June in three districts of Asyut Province. In Africa, the principal foci during recent years have been those in the neighbourhood of Lake Victoria and in the central region of Madagascar. Cases were reported in the Belgian Congo, in Uganda and Kenya. In the Union of South Africa cases were reported in the Transvaal, the Orange Free State and Cape Province. In Madagascar the number of deaths has declined following vaccination campaigns. The chief foci in India at the present time are the Central and United Provinces. During the fiscal year ended in June, 1939, the provisional plague morbidity rate rose from 35.3 per 100,000 of population to 53.2 in the Central Provinces, and from 10.9 to 14.7 in the United Provinces. In Burma the morbidity rate rose to 36.9 during the same period as compared with 20.7 during the previous year. Pneumonic plague appeared in the Pegu district of Burma. In July, cases were reported in China in the villages of Yunnan Province. In Indo-China a number of cases were reported. Cases of plague were reported in Thailand (Siam) where no cases of plague were recorded from March, 1935, to December, 1938. The disease was reported in six provinces of northwest Thailand. During the year 1939 plague was found among ground rodents in Canada for the first time.

The seasonal rise in diphtheria usually begins in September in the northern

hemisphere and continues until the end of November with a decline in December in most countries. On account of the war, it is difficult to estimate the incidence during the last three months of 1939 and to form an opinion of the trend of the disease, but in England and Wales there was a drop in the number of cases reported during the last three months of the year. In Germany, Austria and the Sudeten area, the morbidity during the summer of 1939 exceeded that of the three previous years. In France, a decline which was noted during the first eight months of the year continued. The reduction in morbidity and mortality of diphtheria continues to be observed in most civilized countries.

The general trend of scarlet fever has been downwards since 1934 in France and Hungary and since 1935 in the United States, and in Ireland, Finland, Germany and Roumania since 1936. This decline continued to be observed in England, Belgium, the Netherlands, Switzerland, Poland and Yugoslavia in 1939. The mass evacuation of civil populations in several countries of Europe made it probable that there would be a change in the geographic distribution of the disease during the autumn and winter months, but data so far received did not support this theory. On the whole the situation was better in regard to scarlet fever than during the previous year.

The maximum incidence of typhoid fever is usually reached in the countries of the northern hemisphere during the months of August and September. The data received so far show that there has been no abnormal rise in morbidity in Europe or the United States of America during the first eight months of 1939. On the whole, the situation is comparable with that in 1938 and is better than in 1937.

It is impossible to estimate even remotely the number of civilian deaths due to the war, either directly or indirectly, in combatant countries. It is known that in China such deaths have been extremely great and it is doubtful if accurate information will ever be made available. The disruption of the collection of statistics caused by the European and Asiatic wars will undoubtedly persist and we may not look to those countries for accurate information for a considerable length of time. However, health officers are more concerned with the dissemination of epidemic diseases, and particularly through non-combatant countries, than with peace-time statistics. Meanwhile, there is no indication of widespread dissemination of disease but this may come with the intensive bombardment of cities and consequent destruction of sanitary conveniences. The diseases most likely to spread are meningitis, encephalitis, influenza, typhoid, dysentery and typhus. The advances in our knowledge of the prevention and treatment of these diseases since the last war, together with the improvement in public health facilities in European countries, will help materially to prevent the rapid dissemination of these diseases and bring them under effective control provided that public health and medical services are not totally disorganized.

# Marriage and Mortality

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MARRIAGE, it may be assumed, is the normal state of living in modern society. Whether it is a more healthy state than celibacy is a matter for speculation. Although statisticians have developed valuable indices of health, none is completely satisfactory. Mortality statistics are probably the best criteria of health since they are more reliable than other measurements, but they fail to take into account the great mass of illness which does not lead to death, and certainly they do not measure adequately mental ill health, which in many respects is the most important factor of all.

At first glance mortality figures would seem to indicate that unmarried people are more healthy than married, for the crude death rate of the former is substantially lower than that of the latter. A careful examination of the figures shows, however, that the comparison of unmarried and married persons is like the comparison of curates and bishops. The unmarried persons are much younger than the married. Comparing the mortality experience age for age, the figures show that unmarried persons, both male and female, have definitely a higher mortality than the married. The figures of the Dominion Bureau of Statistics indicate this quite clearly.

Table I gives the unmarried and married adult population according to sex

TABLE I  
ADULT POPULATION OF CANADA ACCORDING TO AGE AND MARITAL STATUS 1921, 1931 AND 1935  
(estimated)

<i>Males</i>								
Year	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
1921.....	688,367	377,406	89,418	18,586	65,087	917,487	570,281	144,386
1931.....	919,914	444,693	124,440	30,797	67,792	1,014,905	757,973	192,021
1935 (est.).....	1,012,533	471,607	138,448	35,681	68,874	1,053,872	833,050	211,075

<i>Females</i>								
1921.....	577,355	217,025	66,535	20,876	178,969	920,778	449,547	81,438
1931.....	770,584	263,845	83,992	30,556	189,631	1,040,123	594,524	113,180
1935 (est.).....	847,876	282,573	90,975	34,428	193,896	1,087,761	652,503	125,877

and broad age groupings for the census years 1921 and 1931 and the estimated figures for 1935. Table II gives the number of deaths in these groups for the 5 years 1933-1937 and the average annual mortality rate per 1,000 for these 5 years.

Although one is justified in saying what appears to be revealed as a fact, that married persons are more healthy than unmarried, one is not justified in

TABLE II  
DEATHS IN CANADA FROM ALL CAUSES ACCORDING TO AGE AND MARITAL STATUS 1933-1937

<i>Males</i>								
Year	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
1933.....	2,363	2,193	2,195	2,429	127	3,161	8,834	11,521
1934.....	2,053	2,278	2,360	2,521	113	3,079	9,154	11,538
1935.....	2,306	2,442	2,339	2,691	108	3,157	9,492	12,031
1936.....	2,337	2,403	2,459	2,868	114	3,193	9,818	12,580
1937.....	2,424	2,452	2,610	3,010	113	3,389	10,381	12,900
Total deaths.....	11,483	11,768	11,963	13,519	575	15,979	47,679	60,670
Annual average.....	2,297	2,354	2,393	2,704	115	3,196	9,536	12,134

<i>Females</i>								
Year	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
1933.....	1,726	1,169	1,130	2,252	588	4,404	6,561	5,754
1934.....	1,658	1,183	1,118	2,302	607	4,068	6,523	5,484
1935.....	1,685	1,252	1,174	2,417	597	4,258	6,658	6,044
1936.....	1,779	1,290	1,180	2,562	660	4,312	7,000	6,176
1937.....	1,729	1,332	1,292	2,595	659	4,272	7,086	6,315
Total deaths.....	8,577	6,226	5,894	12,128	3,111	21,314	33,828	29,773
Annual average.....	1,715	1,245	1,179	2,426	622	4,263	6,766	5,955
Average male death rate per 1,000.....	2.27	4.99	17.28	75.73	1.67	3.03	11.45	57.49
Average female death rate per 1,000.....	2.02	4.41	12.96	70.47	3.21	3.92	10.37	47.31

inferring that marriage is a healthier state than celibacy. It may well be that a larger number of healthy persons get married and indeed this would appear to be very probable since the ranks of the unmarried must be swelled by many sufferers from chronic diseases such as tuberculosis, nephritis, heart disease, and mental disease. Taking tuberculosis as an example of a chronic disease, it is seen in table III that the mortality of the unmarried is much higher than that of the married except in the age group 15-24 among women.

TABLE III  
DEATHS AND DEATH RATES FROM TUBERCULOSIS (ALL FORMS) ACCORDING TO AGE AND MARITAL STATUS, CANADA, 1933-1937

<i>Males</i>								
	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	2,749	2,785	931	206	147	2,719	2,865	788
Annual average.....	550	557	186	41	29	544	573	158
Average annual death rate per 100,000.....	54.3	118.1	134.3	114.0	42.1	51.6	68.8	74.9

<i>Females</i>								
	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	3,736	2,273	388	196	935	3,683	1,554	420
Annual average.....	747	455	78	39	187	737	311	84
Average annual death rate per 100,000.....	88.1	161.0	85.7	113.3	96.4	67.8	47.7	66.7

Certain diseases of later life, however, such as coronary disease and cancer, can hardly exercise a deterrent effect on marriage since they are not detectable as a rule at the marrying age. Coronary disease is thought to be influenced by such things as occupation, worry, etc. If this is true, the mental influence of marriage or celibacy does not appear to be very great so far as its effect on the coronary vessels is concerned, for the figures do not show any significant difference between the mortality experience of the unmarried and the married (see table IV).

TABLE IV  
DEATHS AND DEATH RATES FROM DISEASES OF THE CORONARY ARTERIES AND ANGINA PECTORIS  
ACCORDING TO AGE AND MARITAL STATUS, CANADA, 1933-1937

	<i>Males</i>							
	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	24	244	977	944	4	661	6,226	5,791
Annual average.....	5	49	195	189	1	132	1,245	1,158
Average annual death rate per 100,000.....	0.5	10.3	141.3	529.1	1.2	12.5	149.5	548.7

	<i>Females</i>							
	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	12	48	258	613	11	228	1,810	1,831
Annual average.....	2	10	52	123	2	46	362	366
Average annual death rate per 100,000.....	0.3	3.4	56.7	357.2	1.1	4.2	55.5	290.9

Perhaps suicide is a better indicator of mental state. Table V gives the mortality from this cause. It will be noted that among males the unmarried ones have a much higher mortality than the married. Among females, however, there is no significant difference. This table shows very clearly the constant fact that suicide is more common among men than among women. As a matter of fact, it constitutes a more serious problem than many other causes of death which are talked of more. It would be a public health problem if one had any

TABLE V  
DEATHS AND DEATH RATES FROM SUICIDE ACCORDING TO AGE AND MARITAL STATUS,  
CANADA, 1933-1937

	<i>Males</i>							
	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	262	635	399	84	16	638	1,015	233
Annual average.....	52	127	80	17	3	128	203	47
Annual average death rate per 100,000.....	5.1	26.9	57.8	47.6	4.4	12.1	24.4	22.3

	<i>Females</i>							
	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	109	104	51	10	31	307	254	34
Annual average.....	22	21	10	2	6	61	51	7
Annual average death rate, per 100,000.....	2.6	7.4	11.0	5.8	3.1	5.6	7.8	5.6

clear idea of prevention. Strictly speaking, there is no morbidity from suicide unless one counts unhappiness and frustration as the sickness of which suicide is the end result.

The mortality from cancer in all its forms does not differ greatly in the unmarried and the married, but certain forms of cancer do show what appears to be significant difference in these groups. If trauma plays a part in the production of cancer, one would expect a higher incidence of malignant disease among married than among unmarried women, particularly in cancer of the sex organs. Gynaecologists in general stress the relationship of pregnancy to cancer of the uterine cervix. Anspach says: "For except in women who have borne children, the disease (cancer of the cervix) is uncommon." And again: "Ninety per cent of the patients with cancer of the cervix give a history of previous pregnancy." This latter statement may not seem so impressive if it is realized that approximately 90 per cent of women over 45 years of age are, or have been, married.

Our Canadian figures do indicate a slightly increased mortality from cancer of the cervix among married women, but there is some doubt as to the accuracy of the diagnoses here. Clinicians seem to agree unanimously that cancer of the cervix is eight or nine times as frequent as cancer elsewhere in the uterus. Our mortality figures, however, show a considerably higher mortality from cancer of the uterus than from cancer of the cervix. It may well be that death certificates are commonly filled out as cancer of the uterus when a more precise diagnosis would have indicated cancer of the cervix. It is probably safer, then, to consider all cancers of the female genital tract together. When this is done the death rate among married women is slightly, but probably not significantly, lower than that among unmarried women (see table VI).

TABLE VI  
DEATHS AND DEATH RATES FROM CANCER OF THE UTERUS AND CANCER OF OTHER FEMALE GENITAL ORGANS ACCORDING TO AGE AND MARITAL STATUS, CANADA, 1933-1937

	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	25	115	309	209	16	955	2,167	665
Annual average.....	5	23	62	42	3	191	433	133
Average annual death rate per 100,000.....	0.6	8.1	68.2	122.0	1.5	17.6	66.4	105.7

Cancer of the breast gives one of the most interesting comparisons. Authorities seem to agree that pregnancy and lactation do not favour the development of cancer of the breast. Kilgore says: "In general it seems well established that normal lactation does not predispose to cancer." Burghard and Kanavel state: "The liability of married and unmarried women to cancer of the breast is about equal." And Ewing says: "Pregnancy is without definite influence on cancer of the breast."

Our Canadian experience would indicate a quite definitely higher mortality experience among unmarried women from cancer of the breast (see table VII).

TABLE VII  
DEATHS AND DEATH RATES FROM CANCER OF THE FEMALE BREAST ACCORDING TO  
AGE AND MARITAL STATUS, CANADA, 1933-1937

	Unmarried				Married			
	15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
Total deaths, 1933-1937....	3	133	418	328	2	553	1,853	618
Annual average.....	1	27	84	66	...	111	371	124
Average annual death rate per 100,000.....	0.1	9.6	92.3	191.7	...	10.2	56.9	98.5

## COMMENT

It is seen from the Canadian figures that unmarried persons have on the whole a higher mortality than married. Tuberculosis and suicide are two causes which contribute to this difference. Certain forms of cancer also appear to be more fatal among the unmarried. One of the great killers, coronary disease, does not appear to select the unmarried more than the married. The reasons for these differences are not clear.

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# Mental Hygiene and School Health Work

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IT is just thirty years since the Schools Health Inspection Act was passed in British Columbia and it is interesting to look back over the years that have passed to see what changes and developments have taken place. There have been changes in the types of problems commonly encountered and to some extent in the guiding philosophies. On the whole, however, it is remarkable to note how well the original objectives agree with those of the present day. In the First Annual Report on the Medical Inspection of Schools in Vancouver in 1910, for example, the importance of paying attention to early defects, controlling infectious diseases and providing for adequate lighting, heating and ventilation was discussed. The school health service is still deeply concerned with these problems. There are some comments in this report, however, which point to conditions very much different from those of the present day. There is a discussion about the wisdom of abolishing the common drinking cup in the schools. Another problem which caused concern then was that women teachers' skirts dragged on the floors and were soiled by the oil used to keep down the dust. Lousiness, dirtiness and itch were very much more frequent then than they are now. In one of the early reports by the same officer, it was stated that only two per cent. of the school children were lousy and that this low incidence was gratifying.

Many of the infectious diseases which were very serious then have been almost eliminated now. In addition to increased cleanliness and tremendous improvement with regard to infectious diseases, however, there have been other changes since 1910 which reflect a development in the public health theories and which have inspired the school medical services. It is this development that I should like to emphasize more particularly.

The methods used in medicine at different times and in different parts of the world have always been reflections of the prevailing attitudes towards life. The Ancient Greeks were very rational in their approach to problems and valuable observations about disease were made. In contrast, in the early days of Christianity, observations of natural phenomena were neglected. The belief that man could gain salvation by suffering was prevalent. Diseases were afflictions to be borne with fortitude and resignation or possibly to be cured by Divine intervention. Medicine stagnated for centuries under these conditions.

Despite all our scientific accomplishments, there are still tendencies against the application of available knowledge to the problems of health and disease. People want to get results quickly and easily without going to the trouble of

studying underlying causes. This is apparent in the way people treat themselves with patent medicines in the hope of relieving symptoms. The reasonable thing to do is to try to discover what is wrong and then to see if the error can be corrected. Instead of doing that, people all too frequently run to the nearest drug store to get some medicine to stop a cough or some kind of a tonic "to build them up". In England, over three million pounds a year is spent for advertising patent medicines and health foods (1). It would be interesting to know how much is spent in buying them. Self-medication is not only wasteful but reflects an attitude that is close to the habit of mind of those whose conception of nature is magical. People believe that it is, somehow or other, "good for them" to swill down medicines and rub on ointments.

Satisfactory attitudes towards health are incompatible with a belief, expressed in action though it might be denied in words, that pains and illnesses are due to malignant influences which can be exorcised by unpleasant medicines. A new habit of thought is required if people are to assume responsibility for preserving their own health and to cease relying on magic to protect them against disease. It should be possible to teach people that health is the result of living in accordance with certain biological laws, including the factors that make for wholesome personality development. In giving the Stanford-Binet Intelligence Test children frequently define health as "going to bed early and cleaning your teeth and eating fruit". The definition may vary but it is usually based on the "health habits" which the children have been taught in school. It should be possible to broaden this teaching to the point where we will have a generation with a positive attitude towards health and willing to assume some responsibility for the protection of their own health, going to their physicians for advice and not for miracles.

At the beginning of the century the public health weapon chiefly relied on was regulations for the control of infectious diseases. The accomplishments achieved in this way constitute one of the inspiring chapters in modern history and there is still room for improvement in this direction, of course. Tuberculosis and syphilis are two infectious diseases which could be eliminated with the aid of more stringent regulations. However, while the amount of infectious disease has decreased, degenerative diseases and various kinds of mental diseases have continued to be a serious problem. These are conditions that are not due to definite single causes. Regulations are effective in controlling bacteria, but one cannot by regulations make people eat a suitable diet, get suitable rest and avoid worry. To make headway against the forms of illnesses mentioned, reliance must be placed on education rather than on regulations and one must teach the ways of health and not be content to teach about disease.

Mental diseases constitute one of the chief, if not the chief, hazards to the public health at the present time. Under the term mental diseases one must include not only the psychoses but also other milder conditions. To get a general picture of the prevalence of mental illnesses of one sort and another one must include the neuroses, conditions commonly called nervousness and the

eccentricities and faults of personality which interfere with the efficiency and happiness of individuals.

There were 54,855 patients in the mental hospitals of Canada during 1937 (2). This number includes some of the psychotic, epileptic and mentally defective residents of the country, nobody knows just what proportion of them. It includes also a few of the psychoneurotics. A survey conducted in the Eastern Health District in Baltimore revealed that 4.5 per cent. of the population exhibited "recognizable evidence of mental deviation." The incidence of mental illness in this particular district might not be typical, of course, but it gives some definite information on this subject (3). The Report on British Health Services (4) states on page 22 that "in Scotland and elsewhere sample inquiries have shown that from 25 to 40 per cent. of long illness absences, mostly certified as due to organic troubles such as gastritis and rheumatism, are primarily due to psychoneuroses." In a recent review of 400 cases of nervous disorder after injury, published in the *British Medical Journal*, it was found that 41 per cent. of the cases showed functional nervous disorder as a sequel to accident (5). These figures from various sources give some idea of the magnitude of the problem of mental illness—they are all likely to be underestimates.

With regard to mental illnesses, the beliefs that commonly prevail among people of our day offer an especial barrier to progress. People commonly look upon mental diseases as being in a different class altogether from other diseases. They may be frightened of tuberculosis and cancer, but faced with a severe mental disease their horror and fear are tinged with superstition. Fear and superstition are always enemies of progress. People must be taught to regard mental illnesses of one sort and another as natural disorders to be studied and treated as are other illnesses. As a matter of fact, the distinction that people make between mental illnesses and physical illnesses is altogether too definite. Physical illnesses are always accompanied by mental symptoms and mental illnesses always have their physical accompaniment. Human beings cannot be divided into two parts, one mental and one physical, and diseases certainly cannot be separated on this basis either.

Recent investigations in what is called psychosomatics are providing more and more evidence to support this old plea of the psychiatrists. We must think of diseases as disturbances in the adjustment of individuals to their environment. The disturbing feature in the environment may be a tubercle bacillus, an automobile accident or an unsolved worry. There has been altogether too much tendency for people to look upon their bodies as they look upon their automobiles, as if they were subject to mechanical breakdowns which could be repaired. This is a false and dangerous idea but physicians have done little to counteract it. One cannot worry oneself to the point where he develops peptic ulcers and then put right the trouble by getting a new stomach. He must get at the bottom of the problem and mend his ways of living and solve his conflicts. Mental illnesses of one sort and another are the result of long continued mal-adjustments. The difficulties of adjustment are due in the first place to faulty habits and attitudes. Just as chronically infected tonsils may lead to rheumatism,

so may a chronic refusal to face facts lead one into an impasse from which a mental illness provides the only escape.

The changes in the outlook of public health workers in general and of school medical services in particular since 1910 can, I think, be recapitulated under these headings: the importance of mental factors among the causes of illness is beginning to be recognized, the emphasis is being shifted from disease to health, and there is a tendency to place more reliance on education and less on regulations.

Mental hygiene should be thought of with a background such as this in mind. It is a stage in the evolution of public health work. When health is defined as a state of efficient adjustment between an individual and his environment, then social behaviour is an indication of how good that adjustment is. Physical and mental factors are both important in determining the individual's adjustment and they are so closely related that in many cases they are inseparable.

School doctors, nurses and teachers are in a position to observe several aspects of children's behaviour. Some of these may be described as behaviour towards tasks, towards adult authority, towards other children and towards self. Let us say that a child seems inattentive and lacking in persistence in the classroom, that he is rather evasive and polite but not really very responsive towards the teacher and that he is discouraged about himself and doesn't participate very well in group activities. There we have some indications of a child's adjustment to his environment through his behaviour in various situations. What might they mean? Obviously poor nutrition and lack of sleep might account for that picture or, on the other hand, the child might be struggling with worries that continually bothered him. The same child might gradually begin to compensate for his poor adjustment. He might avoid the unpleasantness of his unsatisfactory life by escaping into a world of his own imagining, or he might find in ill health an excuse for his lack of success and a means of getting sympathy. He might show any one of various types of compensatory behaviour. The point to be made here is that when a child's adjustment is not satisfactory his behaviour should be regarded as a symptom and the cause should be sought in his environment and in his physical and mental make-up. A child's behaviour is symptomatic and physical and mental and environmental factors must all be studied when one is looking for the meaning behind the symptom. This is the viewpoint of mental hygiene. The importance of paying attention to children's adjustments is indicated by the fact that mental illnesses of all sorts and degrees constitute one of the chief hazards to the public health. We know that the mental illnesses of adult life can be traced back to the unwholesome compensations that result from poor adjustments in childhood.

Not only has the general public been unaware of the implications of this argument but physicians themselves frequently paid slight attention to them. For instance, in the report of the British Health Services referred to above (4), the majority of the psychoneurotic patients had been certified as suffering from organic diseases. Surely if the public health is to be safeguarded by educational

efforts then education in the field we call mental hygiene is one of the crying needs.

A school health service, with its opportunities for individual contacts with almost all the families in a community in each generation, is in a better position than any other health or welfare agency to teach the whole population healthful living. While we are constantly emphasizing the importance of diet and rest and protection against infectious diseases and attention to early physical defects, surely we cannot reasonably neglect the opportunity to teach people that wholesome personality development is fully as important as robust physique and that emotional conflict imposes quite as much strain on the human organism as does chronic infection. Children must be allowed to achieve independence and to fulfil their own native tendencies and we cannot have a healthy population as long as a majority of our people fail to realize that it is breaking these health rules that causes the "nervousness" which is given as the reason for so much ill health today.

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# EDITORIAL SECTION

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## RESOLUTIONS PASSED AT THE ANNUAL MEETING

THE resolutions passed at the twenty-ninth annual meeting of the Canadian Public Health Association, held in conjunction with the Manitoba Medical Association in Winnipeg last month, are presented in detail in this issue (page 507).

Of national interest were the resolutions urging the extension of pasteurization in Canada; the more complete utilization of public-health personnel in Canada's war effort; the necessity of health examinations of employed persons, particularly in war industries; and the advisability of preventing a deficiency of the B vitamins through the use of a more satisfactory white flour, since wheat germ and bran, which are very rich in the B vitamins, are largely removed in milling.

At the meeting Dr. A. E. Berry, Provincial Sanitary Engineer, Department of Health of Ontario, reviewed the progress that has been made in Ontario as a result of the legislation enacted last year requiring the compulsory pasteurization of public milk supplies. The experience has shown that it is practicable to have pasteurization conducted in small urban municipalities and in certain rural areas. In view of these findings and of the overwhelming evidence of the value of pasteurization in safeguarding the health of the people against certain communicable diseases, the Committee on Resolutions unanimously approved a resolution urging the extension of the application of pasteurization in all parts of Canada, believing that the benefits of pasteurization can now be provided for citizens in small urban communities as well as in many sections of the more thickly settled rural areas. The Canadian Public Health Association has long endorsed pasteurization. It has stood for the production of clean milk and given every assistance to dairymen in their efforts to achieve milk of the highest quality. The Association will shortly issue, through its Milk Committee, a milk ordinance which it is hoped may be helpful as a basis of uniform legislation in the Provinces.

Data were presented at the meeting which indicated the necessity for careful enquiry and action regarding the hours of labour and other factors relating to the health of industrial workers, particularly those who through the urgency of the times are called upon to work for an excessive number of hours. The

resolution urges that all industrial workers, particularly those in war industries, should have regular health supervision.

It was felt by municipal officers of health and by the leaders in public health throughout the Dominion that the Federal Government should again be assured of the desire of the members of the Association to cooperate in every way in advancing Canada's war effort. The belief was expressed that even greater use might be made of the organized public-health forces in meeting our national needs.

Of special interest was the resolution relating to white bread. Since at least one-third of the caloric requirements of the average Canadian is supplied through white bread, and since in the milling of white flour the essential B vitamins are largely removed, it is not surprising that nutritional studies have shown that considerable sections of the population are receiving insufficient amounts of the B vitamins. It is known that the parts of the wheat which are largely discarded in the milling of white flour, namely wheat germ and bran, are rich in the B vitamins. The vitamin B complex consists of a number of component parts. Several of these have been prepared synthetically. One of them, vitamin B<sub>1</sub>, is known as thiamin chloride. It was suggested by the Ministry of Health in Great Britain last spring that white flour should be fortified by the addition of vitamin B<sub>1</sub> in the form of thiamin chloride. The Medical Research Council of Great Britain took a strong stand against this, urging that it was essential to add the whole vitamin B complex and that this could best be accomplished by modifying the milling process so that a larger part of wheat germ and bran would be present in white flour. In considering the situation as it relates to Canada, the Committee on Resolutions of the Canadian Public Health Association was strongly of the opinion that government action should be taken in Canada along the lines advocated in Great Britain by the Medical Research Council. The Committee appreciated that there might be different ways in which the objective of having adequate amounts of the B vitamins in bread can be achieved. The plan recommended by the Medical Research Council of modifying the milling process would constitute a highly satisfactory method. Changes in the milling process which would provide the necessary content of the B vitamins through the incorporation of wheat germ and some bran can be accomplished without increased cost. It is probable that wheat germ could be added to the flour after milling, or to the bread at the time of baking, with little or no increase in cost, and this more nutritious bread could be sold without any increase in price.

The importance of improving nutrition in the present emergency is fully recognized. Advances in our knowledge now indicate how bread may be made more nutritious and provide sufficient quantities of the B vitamins, which are essential to health. Such benefits should be available for the entire population and not limited to those who may learn of them through public announcements. For that reason, action by the Federal Government to require that all bread should contain adequate amounts of the B vitamins is highly desirable, as otherwise an extensive program of education and advertising would be necessary to encourage the use of such bread. Experience in other fields has shown that



education is slow and often ineffective. Action by the Federal Government, accompanied by suitable explanation, would achieve this highly desirable improvement in one of our main foods. Such action is desirable also because bread prepared from such flour is not so white as that prepared from ordinary white flour, and the feeling of the public that the quality of bread can be gauged by its whiteness might militate against the adoption of this more nutritious bread.

#### VENEREAL-DISEASE CONTROL IN BRITISH COLUMBIA

THE article on commercialized prostitution and venereal-disease control by Dr. Donald H. Williams, in this issue, calls attention to a phase of the venereal-disease control problem to which very little thought has been given since the last war. As far as Canada is concerned, the reason is doubtless that conditions differ a great deal in different parts of the country. Seaports, such as Vancouver and Montreal, are much more likely to show evidence of this disagreeable phenomenon than are inland cities. Doubtless the reason may be found in the shifting population of such cities and in the influx of strangers of diverse moral standards. There undoubtedly are in Canada large metropolitan centres where organized commercialized prostitution is practically unknown. This is the case in Toronto, Canada's second largest city, where for many years the police department has pursued a policy of absolute suppression.

Where such a policy is not the rule, obviously the prostitute will be the commonest source of infection. The reasons are manifest. The contacts of the individual prostitute under such circumstances are many and, as most prostitutes are diseased, their clients become diseased and the venereal-disease rate rises proportionately. Where a "red light" district is closed and the law strictly enforced, the number of contacts decreases just as the customers of a store disappear if the owner closes its doors or the store burns down.

The presence of tolerated or legalized prostitution in a community has other disastrous effects. Moral standards are lowered and, as Dr. Williams suggests, the total of irregular sex relationships, aside from prostitution, increases just as it decreases if severe repressive legislation is instituted as a result of the development of sound public opinion.

To anyone who has studied the situation, arguments in favour of organized prostitution as a means of controlling venereal disease are utterly futile. The fact is that one invariably finds the highest venereal-disease rates in those parts of the world where prostitution is legalized and segregated. When prostitution as a business is successfully attacked, one has taken the first step not only in raising moral standards and civic self-respect but also in raising health standards.

The venereal-disease control program in British Columbia has been carefully planned. The phase dealt with in the article under discussion is one of the most difficult. Dr. Williams is to be commended for his courage and foresight in neglecting nothing in his approach to the solution of the most sinister and one of the most important of public-health problems.

# THE ASSOCIATION'S WORK DURING 1939-40

## (Part V)

### FOURTH ANNUAL REPORT OF THE SUBCOMMITTEE ON STILLBIRTH REGISTRATION AND CERTIFICATION

THIS Subcommittee has been chiefly concerned with the preparation and introduction of a single certificate for the registration of stillbirths in Canada. The function of the Committee, however, has not been limited to the certificate itself. Rather has it undertaken to extend its interests in the subject of stillbirths by giving some consideration to such matters as the development of a scheme for the classification of the causes of stillbirth for national use and certain questions related to the definition of the term *stillbirth* itself.

#### SECTION I: THE NEW STILLBIRTH CERTIFICATE

In all provinces except British Columbia, single registration of stillbirths is now in effect. The following are the dates of introduction of the new certificate by provinces from west to east: Alberta—January 1, 1939; Saskatchewan—January 1, 1940; Manitoba—July 1, 1939; Ontario—July 1, 1940; Quebec—January, 1940; New Brunswick—July, 1939; Nova Scotia—June 15, 1939.

Quebec, of course, has had a single stillbirth form (Form C) in use since 1929 and as a result has already had a full ten years of experience in this field. The new Quebec form, however, is based on the draft prepared by the Committee and is similar to the new forms now in use in other provinces. The one important exception to this is the insertion in the Quebec form of the question (No. 28)—“Was labour induced? ..... How? .....”

The Quebec form also retains the questions related to signs of life after complete birth (pulsation of heart or cord, and spontaneous respiration) which were included in the original Form C. A further difference between the present practice in Quebec and that in other provinces is the use of the stillbirth form for a child having lived less than 24 hours. It is noteworthy also that Quebec is the only province which has incorporated in its new stillbirth certificate the suggestion made by the Committee that births to the mother occurring *before* 28 weeks' gestation as well as those *after* this period should be recorded. This latter difference is not particularly important as long as comparable information is not available on the birth certificate. It is true, of course, that data on order of birth at present available are somewhat in error because no record of abortions and miscarriages is specifically asked on the birth certificate and the extent to which this impairs “order of birth” figures is unknown. At the moment it would appear that “order of birth” must be taken to mean “order of *viable* birth.”

In connection with the medical section of the new stillbirth certificate suggestions have already come to the Committee that consideration should ultimately be given to the inclusion of some of the medical questions which were incorporated in the Committee's experimental stillbirth certificate (1937). Among

the added questions felt to be desirable are: (a) Length of labour? .....; (b) Was labour induced? .....; How? .....; (c) Amount and nature of sedative given the mother .....

The Committee feels, however, that considerable experience should be available with the new form before undertaking any such revision. It would appear from reports already being received that valuable data are even now being obtained. It is important too that supplementary questions be reduced to a minimum having in mind the fact that the certificate is an open one and, further, that detailed clinical studies must in any case depend upon specially devised investigations which might be undertaken in hospitals.

The Committee canvassed the provincial registrars in July to ascertain the response to the introduction of the new certificate and the experience to date. The reports submitted to the Committee were uniformly in agreement that the single registration procedure simplifies registration and at the same time affords a better opportunity for a study of the causes of stillbirth.

The medical profession has not experienced any great difficulty with the new form as was first thought probable, largely no doubt because of the similarity of the medical statement with that on the standard death certificate. The profession generally welcomes the single registration system. Some misunderstanding has been experienced, however, with the question "Did death occur before labour? ..... during labour? ..... after labour but before respiration? ....." At this date it has become evident that it would be preferable to word this question: "Did death occur *before, during or after* labour but before respiration? ....."

The division registrars in the provinces have in general also welcomed the new procedure. It will be some time of course before the new plan becomes fully familiar to the public, the registration officials and the profession.

It is too soon to estimate the value of the new certificate from the medical standpoint. At the same time, it is generally agreed by physicians and registrars that much valuable information is even now being recorded. The urgent need at the moment is for agreement upon a classification and system of coding for the causes of stillbirth, and this is one of the problems to which the Committee must address itself.

## SECTION II: CLASSIFICATION OF THE CAUSES OF STILLBIRTH

The immediate need for agreement upon a tentative list of the causes of stillbirth for routine tabulation purposes is recognized by the Committee. This subject was discussed at some length in the first and third annual reports, and the matter has been explored further by correspondence among the members since. In the third annual report attention was directed to the substantial similarity between a list developed for use in special Ontario studies and based on the work of Dr. Eardley Holland in England, and the list of causes drafted by the Fifth International Conference at Paris, in 1938.

The general feeling of the Committee is that there is still substantial room for improvement from the clinical standpoint, in the list of causes drafted by the

International Conference. The most serious reservation concerns the arrangement and relative prominence of certain entities, in view of known facts. For instance, antepartum haemorrhage and the toxæmias of pregnancy are important causes of foetal death. This clinical fact was apparently overlooked when the list was prepared by the Conference because these two titles are obscured under the heading "Acute disease in, or accident to, the mother."

Several members of the Committee have submitted to actual trial the Ontario classification and the International Lists. For instance, the Annual Report of the Department of Health of the City of Montreal (1938) contains tabulations of the causes of stillbirth, prepared by one of the Committee (Dr. E. Gagnon). In addition, the causes of foetal mortality before the period of viability (28 weeks) are also set out. The classification used for those tabulations is that recommended by the Commission revising the International List of Causes of Death in 1929. The following is an extract from this material:

#### CAUSES OF STILLBIRTH—MONTREAL 1938

CAUSE OF STILLBIRTH (Intl. List, 1929)	M	F	TOTAL
<i>I—Foetal Mortality During Gestation:</i>			
1—Syphilis and other chronic diseases .....	10	2	12
2—Toxaemia of pregnancy .....	55	51	106
3—Malformation incompatible with life .....	15	21	36
4—Other causes and causes not specified .....	53	27	80
<i>II—Mortality From Premature Birth:</i>			
5—Maternal exertion (over-work) .....	0	0	0
6—Traumatism causing premature birth .....	3	1	4
7—Abnormal placental insertion .....	2	3	5
8—Acute diseases and infections .....	2	5	7
9—Chronic infection (syphilis) .....	1	3	4
10—Other causes and causes not specified .....	15	15	30
<i>III—Foetal Mortality During Parturition:</i>			
11—Abnormal presentation and prolapsed cord ....	30	13	43
12—Obstacles to parturition .....	82	53	135
13—Other causes and causes not specified .....	5	4	9
GRAND TOTAL .....	273	198	471

These figures emphasize the rather considerable amount of information on the causes of stillbirth which can be secured from certificates even now. The fact that 25 per cent of the cases fall under the heading "other and unspecified causes" indicates partly the deficiencies in certification but also the room for improvement which existed in the classification suggested by the International Commission in 1929. This Committee has already recorded its opinions on this point in earlier reports—that classification of stillbirths by cause based on time of death in relation to labour and period of gestation, was quite unacceptable clinically.

Compilation of Montreal data according to the Ontario List was also tried out successfully in 1939 and with findings similar to those of the Ontario study of 1937.

Another member of this Committee (Dr. N. R. Rawson) has completed a tabulation of stillbirth in Manitoba by cause according to the tentative list of causes prepared by the International Commission in 1938, as well as according

to the Ontario List. The tabulation covers the year July 1939 to June 1940. In these researches the need for certain modifications in the former list in order to adequately serve clinical needs, became evident.

The following table presents the compilations made according to the two lists, minor condensation being applied to the Ontario List:

CLASSIFICATION OF STILLBIRTHS BY CAUSE  
MANITOBA, JULY 1939—JUNE 1940

INTERNATIONAL LIST (1938)	No.	ONTARIO CLASSIFICATIONS (Condensed)	No.
I—Stillbirth Caused by Disease in, or Accident to the Mother.		A. Complications of Labour	
1. Chronic Disease in the mother		1. Abnormal presentation .....	45
(a) Syphilis .....	1	2. Contracted pelvis .....	16
(b) Others .....	13	3. Cord complications .....	32
2. Acute disease in, or accident to the mother		4. Difficult or prolonged labour .....	9
(a) Toxemia during pregnancy .....	26	5. Dystocia of indefinite or other cause .....	7
(b) Others .....	20	6. Others .....	9
3. Overexertion		B. Antepartum Haemorrhage	
(a) As a result of overwork .....	3	1. Accidental haemorrhage .....	8
(b) Other .....	1	2. Placenta praevia .....	14
4. External violence .....	11	3. Other antepartum haemorrhage ....	2
5. Others .....	3	C. Toxaemias of Pregnancy .....	29
II—Anomalies of the Foetus, Placenta or Cord.		D. Syphilis .....	1
6. Congenital malformations incompatible with life .....	32	E. Placental Disease .....	7
7. Vicious insertion of placenta ....	10	F. Foetal States including Malformations	
8. Other anomalies of placenta and cord .....	18	1. Anencephalus .....	13
III—Death of the Foetus by Injury or Other Causes.		2. Hydrocephalus and spina bifida ....	12
9. Abnormal presentation of the foetus .....	45	3. Other malformations .....	7
10. Malformations of pelvis .....	19	4. Others .....	5
11. Prolapse of the cord .....	10	G. Maternal Disease .....	27
12. Prolonged labour or uterine inertia .....	6	H. Prematurity (no other cause specified) .....	17
13. Obstetrical operations (unqualified) .....	4	I. Cause Unknown or Undetermined ....	28
14. Other causes .....	19	J. Inadequate Data .....	11
IV—Stillbirth Due to Other Causes.			
15. Other unspecified causes .....	58		
TOTAL .....	299	TOTAL .....	299

Details of the inclusions under the several rubrics in the Ontario List have been set out in the third annual report of this Committee, and this presentation essentially comprised a tabular list of the causes for classification.

Comparison of the two alternative classifications (even though based on a relatively small sample of stillbirths) will show how similar in general content they are and yet how different in form, by reason of the lack of clinical parallelism of the basic plans of grouping employed.

It is agreed that the Ontario List offers somewhat less in the way of difficulty in classifying stillbirths by cause and at the same time provides additional

clinical detail. (For complete outline of this List, see third annual report of this Committee.) However, it was realized by the International Conference and it is likewise realized by this Committee that actual trial on a comprehensive scale is desired in order (a) to test the effectiveness of *any* list from the practical clinical standpoint, and (b) to develop a satisfactory *tabular* list according to which assignments may be readily made. The latter problem will require rather broad experience with actual field returns.

The Committee believes that the Ontario List reflects best the needs of clinical and public health workers in reference to the causes of stillbirth, both by the arrangement and grouping of the "causes" and by the adopting of frequency and importance as criteria in drafting the List. Ultimately, the only classification which can be considered satisfactory is one in which the rubrics present "the gross clinical conditions or the pathological state of the foetus" responsible for death.

The Committee's opinions on these and related matters have not changed since the question was first studied in 1937. In the interests of progressive international effort in this field, however, it recommends that the list drafted by the International Conference in 1938 be *tentatively* adopted by the Dominion Bureau of Statistics for routine use *with such modifications and additions* as will enable the collection of cause data on the same basis as and of similar scope to that which would be produced by using the Ontario List. This can largely be accomplished by a finer subdivision of rubrics 2a, 2b, and 6. The Committee is aware that the International Conference in 1938 drafted its list with the chief objective of promoting international interest and research on this whole subject.

The Committee plans to continue its own studies through collaboration of its members in various provinces so that various modifications of the International and Ontario Lists may be further tested. This plan is particularly important in view of the prospect of reconsideration and extensive revision of the International List of Causes of Stillbirths now proposed and which is obviously still in the experimental stage.

### SECTION III: THE DEFINITION OF A STILLBIRTH—STATISTICAL PRACTICE

The statistical definition of a stillbirth as adopted for use in Canada agrees with that recommended by the League of Nations (1925) and the International Institute of Statistics (1936). This definition differs, however, from that adopted for the purpose of registration in Great Britain, which is:

"any child which has issued forth from its mother after twenty-eight weeks of gestation and which did not at any time after being completely expelled from its mother, breathe or show any other sign of life."

Thus, in Great Britain any child which has shown *any* sign of life after separation from the mother is considered as live-born for registration purposes.

In United States the statistical definition of a stillbirth is:

"a foetus showing no evidence of life after complete birth (no action of heart, breathing, or movement of voluntary muscle), if the 20th week of gestation has been reached."

In this latter connection, it is noteworthy that the new American standard



Certificate of Stillbirth does *not* include a question regarding the period of gestation.

The differences between the three definitions of a stillbirth involve both the period of gestation and the criterion of life. A clear separation between liveborn and stillborn will probably never be attained to the full satisfaction of everyone but it seems reasonable that the convention adopted in defining a stillbirth for statistical purposes should rest with those clinicians who are chiefly concerned with this problem. It is a paramount interest therefore that Dr. Eardley Holland was a member of the Committee of the Health Organisation of the League of Nations which proposed the definition adopted in Canada (Canad. Pub. Health J., 29: 458, 1939).

This Committee believes that *in general* the present Canadian definition may prove fairly satisfactory clinically. Experience alone will indicate whether or not this is actually the case.

In its second annual report the Committee recorded its observations concerning the statistical practice in respect to children born alive before twenty-eight weeks' gestation. The Committee has continued its inquiries on this subject. The practice in Canada is to exclude from tabulations of stillbirths, livebirths and infant deaths (i.e. to classify as "no birth") all infants in which the period of gestation is stated to have been less than twenty-eight weeks and in which the infant is stated to have been born alive but to have died within twenty-four hours. In Manitoba the practice has been to *include* these with ordinary live births and infant deaths.

Recognizing the fact that both United States and English practice in the above respect would tend to increase the infant mortality rate, while present Canadian practice would tend to reduce it (by as much as 5 per cent), the Committee believes that consideration should be given to adopting a practice which would be more in keeping with the policy of the countries above named.

The opinion recorded on this point by the Committee in its second annual report (Canad. Pub. Health J., 28: 569, 1938) was:

*"For the sake of comparability and since there is a fairly wide margin of error in estimating the period of gestation, consideration should be given to the suggestion that any child which manifests the accepted criteria of life, namely respiration after complete birth, should be registered as a live birth, and all deaths of live born children should be included in both live birth and infant death statistics, regardless of the period of gestation."*

At this stage it would be necessary for the Dominion Bureau to re-canvass the Provincial Departments before any change could be effected on a national scale. The subject is of sufficient importance to be pursued further because of the relationship which it has to clinical opinion as to the definition of a stillbirth for statistical purposes.

In keeping with the introduction of the new form for the single registration of stillbirths, amendments to the Vital Statistics Acts of several of the Provinces have been made. Nova Scotia, for instance, has adopted an amendment to its Act which specifies the use of a single special certificate and which sets out the essentials of the definition of a stillborn child for the purposes of registration on the new certificate.



The Vital Statistics Act of Saskatchewan has also been amended to provide for the new practice in respect to stillbirths. The changes were discussed briefly in the previous annual report of the Committee.

During the next twelve months, the Committee plans extended enquiries into the use of the new certificate as well as further studies on the causes of stillbirth and their classification, as revealed by random sample of field returns in four provinces. With the completion of these investigations and the presentation of a formal report to the Association thereon, the tasks assigned to the Committee will have been completed.

H. A. ANSLEY, ERNEST COUTURE, EUGENE GAGNON, C. F. W. HAMES, DONALD MACKIE, N. R. RAWSON, PAUL PARROT, E. J. PICTON, and A. H. SELLERS (*Chairman*).

September, 1940.

#### REPORT OF THE SUBCOMMITTEE ON CONFIDENTIAL DEATH CERTIFICATION

AT the 1939 annual meeting of the Association held in Toronto, a special meeting of the committee was held on Monday afternoon, June 12th, at which were present Dr. P. S. Campbell, Chief Health Officer of Nova Scotia; the late Dr. H. E. Young, Provincial Health Officer of British Columbia; Dr. M. R. Bow, Deputy Minister of Public Health, Alberta; Dr. F. W. Jackson, Deputy Minister of Health and Public Welfare, Manitoba; Dr. R. O. Davison, Deputy Minister of Public Health, Saskatchewan; Mr. S. J. Manchester, Recorder of Vital Statistics, Ontario; Dr. H. C. Cruikshank, Medical Director of the Manufacturers Life Insurance Company, Toronto; Mr. G. L. Holmes, Actuary of the Manufacturers Life Insurance Company; Dr. L. A. Pequegnat, Deputy Medical Officer of Health of Toronto; Mr. T. E. Ashton, Statistician, Department of Public Health, Toronto; Dr. R. D. Defries and Dr. M. A. Ross, School of Hygiene, University of Toronto. Dr. A. H. Sellers, Medical Statistician, Department of Health of Ontario, acted as secretary.

Following an extended discussion, a small working group, consisting of Mr. T. E. Ashton, Dr. N. R. Rawson, Mr. S. J. Manchester, Dr. P. S. Campbell and Dr. H. C. Cruikshank, with the chairman and secretary, was appointed. This committee was instructed to arrange, if possible, for studies similar to those conducted in the Province of Quebec. It has not been possible, however, for this committee to proceed as yet with such studies.

I have pleasure in recording that in February confidential certification was generally introduced throughout the Province of Quebec. It is not possible at this time to speak of the results, and it is my intention to present a summary of these results after the close of this year. I may, however, add that I believe the medical profession are very pleased with the closed certificate. Furthermore, those charged with the responsibility of the collection of vital statistics in muni-

cipalities are also pleased and satisfied. It has been noted that there is a considerable increase in the number of certificates with detailed medical statements, and I believe that physicians are presenting more information, thus enabling us to know the true cause of death. The use of the closed certificate has not created any serious problems for the insurance companies. Certificates are obtained in the usual way from physicians, and in a few instances application has been made to the Division of Demography for confirmation which has been readily provided.

This interim report serves to indicate that substantial progress is being made in the Province of Quebec in making death certification confidential.

PAUL PARROT, *Chairman.*

September, 1940.

#### REPORT OF THE MILK COMMITTEE

THIS Committee has recognized that two primary objectives are to be sought in the consumption of milk and milk products in Canada. The first of these is that there is need for an increased consumption of milk, particularly by low-income families. Dietary surveys in various centres have shown, as has a special survey conducted by the Dominion Department of Agriculture, that milk and cheese, the chief sources of calcium, are not used in sufficiently large amounts to ensure an adequate supply of that element. The second objective, which is equally important, is to promote the use of such safeguards as will ensure that the spread of infectious diseases by milk and milk products will be prevented. It would be unwise, obviously, to use a food unless it were safe. Both objectives require programs of educational work by the Association and by other bodies.

There is definite need for securing information regarding methods of handling milk, and particularly about the use of pasteurization, in various parts of Canada. To secure such information the Committee prepared a questionnaire which was sent to the medical officers of health of all municipalities of 2000 and over. Many of the forms have been returned and a report is being prepared.

The Committee felt that the cause of milk sanitation could be served by preparing a standard milk ordinance which could be adopted by any or all administrative units in the country. The use of such an ordinance would make possible uniform regulations throughout Canada. At present there is wide divergence, even in one province, between regulations of different municipalities regarding the handling of milk at farms. In preparing the standard milk ordinance great assistance was given by Dr. Eric L. Davey of the School of Hygiene, University of Toronto. Co-operation of milk producers and of others vitally interested was also secured. The proposed ordinance covers definitions which can be used in enforcement, adulteration, the production of milk, and the handling of it at all stages. The ordinance has been submitted to the Dominion Council of Health by Dr. John T. Phair and is now receiving consideration by the various Provincial Departments of Health. Criticisms and suggestions advanced by these bodies

will be incorporated in a final draft which will be published in the Milk Number of the Canadian Public Health Journal, to be issued in January. The Milk Committee has assisted in planning this special Milk Number. The two principal objectives of the Committee have formed the basis of the number. Two classes of papers have been suggested: those dealing with the need for greater consumption of milk, and those concerned with milk sanitation.

In preparing final reports, the Committee plans to make available considerable technical information regarding pasteurization and other milk processing, regarding laboratory tests, and concerning milk control. The publication of such information, of data accruing from the survey mentioned above, and of the standard milk ordinance should be of assistance to all organizations concerned with the consumption of milk.

September 1940.

E. W. McHENRY, *Chairman.*

#### REPORT OF THE COMMITTEE ON THE ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH

THE members of the Committee are pleased with the continued improvement in the content and form of the annual reports received from the medical officers of health of the urban centres. For reporting mortality and morbidity data, the majority of health officers are using the standard forms which were prepared by the Section of Vital Statistics and Epidemiology and made available by the Committee. The general use of the standard forms makes it possible to obtain for practically all the larger cities data in a form that permits of comparison. Each year more municipalities are distributing their reports in printed form.

It is the hope of the Committee that every health officer will include in his report the budget of the department, showing the distribution of expenditures according to health activities. Without such an analysis it is almost impossible to compare the expenditures for health work in different municipalities. The work which the Committee on Full-Time Health Services is doing in presenting to departments of health a suitable form for analysis of expenditures will lead to a clarifying of the problems associated with a satisfactory budget-form.

An increasing number of medical officers have accepted the suggestion of the Committee that the report be prepared with the objective of fostering an active public interest in the community's health accomplishments and needs. The members of the Committee have been greatly interested in the development of the Canadian City Health Conservation Contest which will be conducted by the Canadian Public Health Association in co-operation with the American Public Health Association. The contest will be open to any city with a population of ten thousand and should be of great assistance to the medical officer in focusing attention on deficiencies in the local public health program and in enlisting support for their improvement. The members hope that every eligible city will enter the contest. Although at first thought the introduction of such a plan now, dur-

ing the war, might seem untimely, consultation with medical officers of health of a number of cities indicated that it was their feeling that such a step should be taken, as it would be helpful in strengthening health departments at this time. This is in accord with a resolution passed at the Dominion Council of Health at its meeting in Ottawa last May, urging that every effort be made to maintain and strengthen the existing health departments in order that maximum national efficiency may be achieved.

D. V. CURREY, *Chairman.*

September, 1940.

#### FIFTH ANNUAL REPORT OF THE STUDY COMMITTEE OF THE PUBLIC HEALTH NURSING SECTION

**I**N times like these every effort must be made to render as effective service as possible and at the same time conserve the time and energy of those in key positions by eliminating unnecessary committee work.

The function of the Study Committee, therefore, should be carefully considered from this point of view. The question has been raised as to whether there is duplication of activities of the Public Health Nursing Section of the Canadian Nurses Association and the Study Committee of the Canadian Public Health Association. While it is true that nurse members of the Committee are also members of the Canadian Nurses Association, it should be borne in mind that the latter is a purely nursing organization. The Canadian Public Health Association offers membership to health officers and public health nurses from every Province in Canada and thus provides a unique opportunity for discussion of common problems in attempting to give more adequate community health services.

The Study Committee was organized for the purpose of studying problems referred to it by the Association and also to survey the field from time to time to discover problems requiring investigation.

During its brief existence, a preliminary survey has been conducted and two subcommittees have been set up. The first, under the direction of Miss Elsie Hickey of Toronto, has been studying the matter of qualifications for employment. The second, under the chairmanship of Miss Marion Nash of Montreal, has undertaken to investigate the problems of supervision and staff education.

In accordance with a decision reached at a meeting of the Committee held in Toronto in 1939, the field was again canvassed to discover problems which should be studied in the interest of promoting more effective public health nursing service. Questionnaires were sent to twenty-five representative health officers and public health nurses throughout Canada. The replies indicate that the following topics should receive attention in addition to those under study:

1. Methods for interpreting services to the public and continuous education in order to prevent curtailment of existing services.
2. Method for extending services to undeveloped areas.

3. Provision and maintenance of cars for public health nurses.
4. Determination of what are ESSENTIAL public health nursing services.
5. Analysis of health education methods and results.
6. Methods for closer co-operation between health agencies and the establishment of Community Councils as a means of safeguarding essential services.
7. Adequate preparation of a sufficient number of qualified workers.
8. Formulation of methods for teaching nurses how to make better use of records and reports.
9. Use of volunteers by health agencies, including recruiting and training.

If solutions for these problems are to be found, it is obvious that considerable work will be necessary. If maximum results are to be achieved with economy of time and effort, it will be essential to make use of available resources. With this in mind, and in order to clarify the function of the Study Committee, the following recommendations are presented for consideration:

That the Study Committee of the Canadian Public Health Association continue to survey the field from time to time to discover problems in need of study.

That in order to get best results and to prevent overlapping of effort, when problems for study are found, they should be carefully considered from all angles and then referred to the existing group best qualified to conduct such a study. If no adequate group exists, it may be advisable to appoint a subcommittee for the purpose.

It is further recommended that the Study Committee might also function as a central clearing station where a record of all public health studies under way in Canada could be kept on file and would be available for consultation by any group contemplating a study in this field. This should eliminate duplication of effort.

If these recommendations meet with the approval of the Section and the Association as a whole, the future function of the Study Committee will be guided by a clearly defined policy.

MARY S. MATHEWSON, *Convener,*  
*Study Committee of the Public Health Nursing Section.*

September, 1940.

## REPORT OF THE COMMITTEE ON FULL-TIME HEALTH SERVICES

THE appointment of this committee is further evidence of the importance which the Association places on local health services. Because there were no data collected in Canada which permitted of learning, even in a most general way, of the expenditures for public health by local municipalities, the Executive Committee in 1939 constituted a committee to study this question.

As a result of a survey made through the co-operation of the provincial departments of health, it was found that these data could be obtained only from the municipal departments of health and other departments of municipal government. It was decided that the committee should, for the present, concentrate its efforts on collecting data relating to municipalities having a full-time health officer. These municipalities include cities, towns, townships, county health units, and combined areas. A series of forms was prepared which, after submission to leading health officers, were sent to every full-time medical officer of health in Canada. The first enquiry related to the organization and activities of the departments during 1938. Slightly revised forms, illustrated herewith, are being used for the collection of the 1939 data. The data obtained present a clear picture of the health organization in all the communities and of appropriations for public health and hospital and welfare services. Information has been secured also concerning the personnel of the departments, their number and professional qualifications. In conducting the 1938 survey the committee had the services of Dr. Eric L. Davey, D.P.H. It is hoped that the report of the findings will be presented within a few months. Including county health units, the report relates to more than seventy-five health departments.

The surveys of the two years 1938 and 1939 will provide accurate information concerning conditions prior to the war and should for this reason be particularly valuable. It is planned to make the survey annually, recording the progress in the provision of full-time health services and changes in expenditures, etc. This information, available for all municipalities in Canada with a full-time medical officer, will provide the facts on which plans may be made for the extension of full-time services through the co-operation of provincial and federal authorities. It is obvious that in certain of the provinces no extension of services in rural areas can be undertaken unless financial or other assistance is provided. Facts are essential before such problems can be adequately considered, and it was for this purpose that the committee of the Association was established.

Four of the forms are presented on the following pages.

R. D. DEFRIES, *Chairman.*

GENERAL DATA

Population (assessed).....

Area in square miles.....

**DEPARTMENTAL PERSONNEL WITH QUALIFICATIONS**

Kindly fill in the personnel of your department of health by use of the table below. Indicate, where possible, those with special qualifications in public health work.

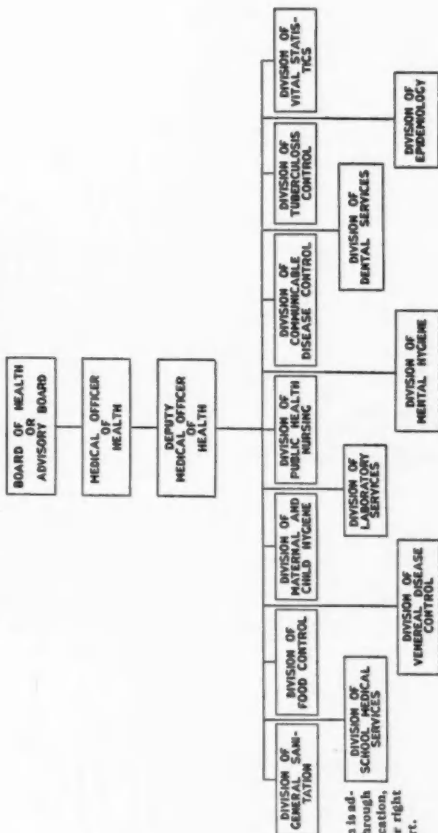
Personnel	Full-Time		Part-Time	
	Total Number	No. with degree or diploma in public health	Total Number	No. with degree or diploma in public health
<b>PHYSICIANS AND DENTISTS:</b>				
Medical Officer of Health.....				
Deputy Medical Officer.....				
School Medical Physicians.....				
School Dentists.....				
Child Hygiene Physicians.....				
Venereal Disease Physicians.....				
Mental Hygiene Physicians.....				
Tuberculosis Physicians.....				
Epidemiologist.....				
Laboratory Director.....				
<b>PUBLIC HEALTH NURSES:</b>				
Director.....				
Supervisors.....				
Nurses.....				
<b>SANITARY INSPECTORS:</b>				
Chief Inspector.....				
Chiefs of Milk, Food, Housing, Plumbing Divisions, etc.....				
Sanitary Inspectors.....				
<b>CLERICAL STAFF:</b>				
Statistician.....				
Secretary.....				
Clerks.....				
<b>OTHER PERSONNEL:</b>				
Ambulance Drivers.....				
.....				
.....				



# CHART FOR INDICATION OF DIVISIONS OF PUBLIC HEALTH DEPARTMENT

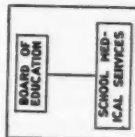
NOTE: This chart is for your use in outlining the organization of your department. The use of this diagram permits of uniform presentation.

- (a) Kindly indicate by "X" the present existent divisions of your department.
- (b) Supplement diagram by indicating any advisory boards.



If this division is administered through Board of Education, mark on lower right corner of chart.

If school medical services are under the Board of Education, kindly use this square indicating by "X" that services are so provided.



INDICATE ANY OTHER SPECIAL DIVISIONS IN BLANK SPACES



## VITAL STATISTICS REPORT

### FOR THE YEAR 1939

Medical officers of health are familiar with the tables prepared by the Section of Vital Statistics of the Canadian Public Health Association relating to vital statistics which have been adopted by almost all the urban municipalities throughout Canada. *If these tables are included in your annual report, the data requested herewith need not be supplied.*

#### BIRTHS—1939

Total number of live births..... Rate per 1000 population.....  
*(Including non-residents)*  
 Total number of stillbirths..... Rate per 1000 live births.....  
*(Including non-residents)*  
 Included in the above were.....non-resident births and.....  
 non-resident stillbirths.

#### DEATHS—1939

Total number of deaths..... Rate per 1000 population.....  
*(Including non-residents)*  
 Included in the above were.....non-resident deaths.

#### INFANT MORTALITY

Total number of deaths of infants under one year.....  
*(Including non-residents)*  
 Rate per 1000 living births.....  
*(Including non-residents)*  
 Included in the above were.....non-resident deaths.

## IMMUNIZATION REPORT

#### Diphtheria Toxoid:

Number of individuals given three doses in clinics or by other arrangement of the Department.....

#### Smallpox Vaccine:

Number vaccinated in clinics or by other arrangement of the Department.....

#### Scarlet Fever Toxin:

Number given five doses in clinics or by other arrangement of the Department.....

## REPORTED CASES AND DEATHS FROM CERTAIN COMMUNICABLE DISEASES, 1939

Disease	Cases	Deaths		Mortality Rate per 100,000 pop.
		Residents	Non-Residents	
Anterior Poliomyelitis.....	.....	.....	.....	.....
Diphtheria.....	.....	.....	.....	.....
Measles.....	.....	.....	.....	.....
Scarlet Fever.....	.....	.....	.....	.....
Smallpox.....	.....	.....	.....	.....
Tuberculosis.....	.....	.....	.....	.....
Typhoid Fever.....	.....	.....	.....	.....
Whooping Cough.....	.....	.....	.....	.....

## REPORT OF THE COMMITTEE ON ARCHIVES

THE Committee on Archives reports with deep regret the death of the following members during the period from June 1, 1939 to June 30, 1940:

- Dr. A. W. Allingham, Medical Officer of Health, Broadview, Saskatchewan.  
Dr. J. A. Amyot, formerly Deputy Minister of Pensions and National Health, Ottawa.  
Dr. C. H. Carruthers, Medical Officer of Health, Florence, Ontario.  
Dr. H. H. Casselman, Medical Officer of Health, Chesterville, Ontario.  
Dr. A. H. W. Caufield, Toronto, Ontario.  
Dr. W. R. Coles, Regina, Saskatchewan.  
Dr. C. G. Cox, Saskatoon, Saskatchewan.  
Dr. G. H. Craig, Medical Officer of Health, Broadview, Saskatchewan.  
Dr. L. F. Cutten, Medical Officer of Health, Fillmore, Saskatchewan.  
Dr. Campbell Davidson, Medical Officer of Health, Qualicum Beach, B.C.  
Dr. R. D. Dewar, Medical Officer of Health, Melbourne, Ontario.  
Dr. A. J. Douglas, formerly Medical Officer of Health, Winnipeg, Manitoba.  
Dr. J. S. Douglas, Federal Quarantine Service, Halifax, Nova Scotia.  
Dr. C. A. Drummond, Medical Officer of Health, Golden, British Columbia.  
Dr. G. F. Ferrier, Medical Officer of Health, South Mountain, Ontario.  
Dr. J. G. FitzGerald, Director, School of Hygiene and Connaught Laboratories, University of Toronto.  
Dr. W. D. Forest, Medical Officer of Health, Halifax Municipality, and chairman of the City Board of Health.  
Dr. J. E. Germain, Medical Officer, Rimouski County Health Unit, Quebec.  
Dr. A. D. Graham, Medical Officer of Health, Bothwell, Ontario.  
Dr. M. A. Griffith, Medical Officer of Health, Lintlaw, Saskatchewan.  
Dr. E. B. Hall, Medical Health Officer, Bridgetown, Nova Scotia.  
Dr. G. W. Hall, Medical Officer of Health, Little Britain, Ontario.  
Dr. W. A. Harvie, Regina, Saskatchewan.  
Dr. H. R. Hay, Medical Officer of Health, Wiarton, Ontario.  
Dr. Walter Henderson, Medical Officer of Health, Hawarden, Saskatchewan.  
Dr. A. B. Hyndman, Medical Officer of Health, Carp, Ontario.  
Dr. A. Jeannotte, Ministry of Health, Province of Quebec.  
Dr. H. E. Johnson, Medical Officer of Health, Mt. Albert, Ontario.  
Dr. Robert Johnston, Medical Officer of Health, Tamworth, Ontario.  
Hon. Pio H. Laporte, M.D., Minister of Health and Labour, Province of New Brunswick.  
Dr. D. R. Livingstone, Medical Officer of Health, Melville, Saskatchewan.  
Dr. F. D. McCulloch, Moose Jaw, Saskatchewan.  
Dr. J. W. McIntosh, formerly Senior Medical Health Officer of the Metropolitan Health Committee, Vancouver, British Columbia.  
Dr. J. G. McKee, Medical Officer of Health, Elk Lake, Ontario.  
Dr. D. C. McKenzie, Medical Officer of Health, Fort Frances, Ontario.  
Dr. C. E. McLean, Medical Officer of Health, East York, Ontario.  
Dr. E. W. McNeice, Medical Officer of Health, Aylmer, Ontario.  
Dr. Findlay Munroe, Medical Officer of Health, Paris, Ontario.  
Dr. James Roberts, Medical Officer of Health, Hamilton, Ontario.  
Dr. J. B. Stallwood, Medical Officer of Health, Beamsville, Ontario.  
Dr. F. J. Walker, Medical Officer of Health, Wheatley, Ontario.  
Dr. Joseph Wilkinson, Regina, Saskatchewan.  
Dr. A. M. Young, Saskatoon, Saskatchewan.  
Dr. H. E. Young, Provincial Health Officer, Victoria, British Columbia.

June, 1940.

G. D. PORTER, *Chairman.*

## REPORT OF THE COMMITTEE ON RESOLUTIONS

THE Committee on Resolutions, comprising Dr. J. E. Davey, Hamilton (chairman), Dr. C. E. Dolman, Vancouver, Dr. Ad. Groulx, Montreal, and Dr. C. W. MacMillan, Fredericton, presented the following resolutions which were adopted by the Association during its annual meeting held in Winnipeg September 19th to 21st.

1. Be it resolved that the thanks of the Association be extended to the Press of Winnipeg for their co-operation and for the allotment of space given to the papers and deliberations of this meeting.
2. Be it resolved that the thanks of the Association be conveyed to the Hon. I. B. Griffiths, Minister of Health and Public Welfare, Province of Manitoba; Alderman P. Bardal, Chairman of the Health Committee, City of Winnipeg; the officers of the Manitoba Medical Association; and the members of the local committee, for their generous hospitality and their co-operation in the program arrangements.
3. Be it resolved that the Association extend to the Management of the Fort Garry Hotel their appreciation of the service provided for the members during the meeting.
4. Be it resolved that the felicitations of the Canadian Public Health Association in convention be extended by a representative of the Association to the American Public Health Association at its annual meeting in October.
5. Be it resolved that the Association notes with deep regret the deaths of a number of its members during the past year and requests that the Secretary be instructed to convey to the members of their families the sympathy of the Association in their bereavement.
6. Whereas the Canadian Life Insurance Officers Association has expressed interest in the work of the Canadian Public Health Association and appreciation of its activities by continuing its financial support,  
Be it resolved that this Association express to the Canadian Life Insurance Officers Association its hearty thanks and assure the executive of the desire of this Association to further all measures designed to improve the state of the public health.
7. Be it resolved that the thanks of this Association be extended to the American Public Health Association for making possible, in co-operation with the W. K. Kellogg Foundation, the Canadian Rural Health Conservation Contest; and for providing a City Health Conservation Contest in co-operation with the Metropolitan Life Insurance Company.
8. Be it resolved that this Association in convention assembled wishes to assure the Dominion Government of its earnest desire to serve the needs of Canada in every possible way in this time of emergency, believing that the utmost utilization of the trained public health personnel of provincial and municipal departments of health should be made in order to promote to the maximum the health of both the armed forces and the civilian population.

9. Whereas the industrial output of Canada must be maintained at a maximum for war purposes,

And whereas to accomplish this it is necessary to conserve the health of wage-earners by every means at our disposal,

Be it resolved that employees in war industry be given the advantages of regular health supervision at their work, analagous in principle to that provided for the armed forces.

10. Whereas in the process of milling white flour practically all wheat germ is removed, resulting in the loss of the B vitamins, which are essential for health,

And whereas white bread provides about one-third of the nutritive requirements of the average Canadian diet,

And whereas it has been shown that considerable sections of the population suffer from a deficiency of these essential vitamins,

And whereas it has been established that this deficiency may be met by bread made from flour to which has been added a small amount of wheat germ,

And whereas all of the essential B vitamins are present in wheat germ,

Be it resolved that the Dominion Government be urged to take steps, with the advice of its Council on Nutrition, to assure that the diet of the people of Canada shall not lack the benefits to be derived from the use of bread containing added wheat germ;

Be it resolved further that it be urged upon the Government that the addition the B vitamins be accomplished by the addition of wheat germ to the flour, and not by the addition of one or more of the known individual components of vitamin B;

Be it resolved further that, in the opinion of this Association, such action is urgent in view of the necessity both of maintaining national health under the special stress of the times, and of preventing the possible exploitation of this important new knowledge in the field of nutrition.

11. Whereas this Association has for many years endorsed the protective value of the pasteurization of milk,

And whereas the practicability of the application of compulsory pasteurization has been demonstrated in urban communities of 500 population or over and even in many rural municipalities on a Province-wide basis,

Be it resolved that all Provincial Governments be urged to enact legislation that will result in the application of this protective procedure to the supplies of all milk and milk products distributed in such communities.

12. Whereas this Association through its Committee on the Certification of Sanitary Inspectors has purposed to improve the administration of public health through the establishing of standards for sanitary inspectors, and believes that properly qualified sanitary inspectors are essential in public health work,

Be it resolved that this Association again urges that municipal and provincial health authorities appoint only certified sanitary inspectors for full-time appointments, and part-time appointments wherever possible.

## REPORT OF THE COMMITTEE ON NOMINATIONS

THE Committee on Nominations, comprising Dr. H. C. Cruikshank, Toronto (chairman), Dr. N. L. Burnette, Ottawa, Dr. B. C. Keeping, Charlottetown, and Dr. Stewart Murray, Vancouver, presented the following nominations which were adopted by the Association during its twenty-ninth annual meeting, held in Winnipeg, September 19th to 21st.

## OFFICERS, 1941

*Honorary President:* The Hon. Henri Groulx, Minister of Health and Provincial Secretary, Province of Quebec.

*President:* Dr. Jean Gregoire, Deputy Minister, Ministry of Health of Quebec.

*Vice-Presidents:* Dr. Grant Fleming, Montreal; Dr. J. J. McCann, Renfrew, Ont.; Dr. B. T. McGhie, Toronto; Dr. Arthur Wilson, Saskatoon.

*Honorary Secretary:* Dr. J. T. Phair, Toronto. *Associate Secretary:* Dr. A. H. Sellers, Toronto. *Honorary Treasurer:* Dr. A. L. McKay, Toronto. *Chairman of the Editorial Board,* Dr. R. D. Defries, Toronto. *Executive Assistant,* Mr. R. L. Randall, Toronto.

*Executive Committee:* Dr. Gordon Bates, Toronto; Dr. H. C. Cruikshank, Toronto; Dr. D. V. Currey, St. Catharines, Ont.; Dr. R. O. Davison, Regina; Dr. R. D. Defries, Toronto; Dr. Grant Fleming, Montreal; Dr. D. T. Fraser, Toronto; Dr. Jean Gregoire, Quebec; Dr. A. L. McKay, Toronto; Dr. J. T. Phair, Toronto; Dr. G. D. Porter, Toronto; Dr. A. H. Sellers, Toronto. Dr. R. E. Wodehouse, Ottawa.

*Provincial Representatives:* Dr. G. F. Amyot, Victoria; Dr. Gordon Bates, Toronto; Dr. C. J. W. Beckwith, Sydney, N.S.; Dr. A. E. Berry, Toronto; Dr. Alan Brown, Toronto; Dr. C. P. Brown, Ottawa; Dr. P. Creelman, Charlottetown; Dr. H. C. Cruikshank, Toronto; Dr. J. S. Cull, Victoria; Dr. J. E. Davey, Hamilton; Dr. C. E. Dolman, Vancouver; Dr. C. R. Donovan, Winnipeg; Dr. Grant Fleming, Montreal; Dr. A. R. Foley, Quebec; Dr. D. T. Fraser, Toronto; Dr. Ad. Groulx, Montreal; Dr. J. J. Heagerty, Ottawa; Dr. W. H. Hill, Calgary; Dr. Gordon P. Jackson, Toronto; Dr. B. C. Keeping, Charlottetown; Dr. G. M. Little, Edmonton; Mr. T. J. Lafrenière, Montreal; Dr. T. A. Lomer, Ottawa; Dr. Morley Loughheed, Winnipeg; Dr. J. J. McCann, Renfrew, Ont.; Dr. A. C. McGugan, Edmonton; Dr. C. W. MacMillan, Fredericton; Dr. J. J. MacRitchie, Halifax; Dr. Stewart Murray, Vancouver; Dr. G. R. Walton, Regina; Dr. A. Wilson, Saskatoon.



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**ALEXANDER JOSEPH DOUGLAS, LL.D., B.A., M.B., C.M.,  
F.R.C.P.(C.)**

**A**LLEXANDER JOSEPH DOUGLAS, medical officer of health of the City of Winnipeg for almost forty years, died on June 30th in his sixty-seventh year. Few men have given such long and distinguished service to a community. He became Winnipeg's first full-time medical health officer at the age of twenty-six, and on April 30, 1939, completed almost forty years of service. To this post he brought energy, versatility, clear thinking, diplomacy, and a remarkable capacity for detail. His work on behalf of the health department of Winnipeg, with which his name was synonymous for almost four decades, won recognition throughout North America. When he took up his work in 1900, typhoid fever was rampant, outbreaks of smallpox had been numerous, and there was an urgent need for safe water and milk supplies. During his regime an ample supply of pure water was brought in from Shoal Lake in the Lake of the Woods region several hundred miles distant. Pasteurization of milk was urged, with rigid inspection of dairies supplying the city. Typhoid fever was made a rarity and free smallpox vaccination for children, diphtheria-immunization clinics, public milk-depots, and the provision of a public-health nursing service reduced infant mortality by two-thirds.

Dr. Douglas was born at Ekfrid, Ontario, and graduated in medicine

from Manitoba Medical College. After a year as intern in the Winnipeg General Hospital he took post-graduate work in London. He was intimately associated with the Medical College for almost as long a period as that in which he served as medical officer, completing thirty-seven years of service last year. As Professor of Public Health he contributed much to the advancement of public health not only in Manitoba but also beyond the boundaries of the Province. In May, 1937, the University officially recognized his years of service in behalf both of the university and the city by conferring upon him the honorary degree of LL.D. He was a Fellow of the American Public Health Association and one of its vice-presidents, and a Fellow of the Royal Sanitary Institute. To the Canadian Public Health Association he gave effective leadership as a member of the Executive Council and as President in 1930. Last year the Association had the privilege of conferring upon him honorary life membership in recognition of his distinguished contribution to the advancement of public health. Less than a month before his death he was present at a meeting of the Medical Faculty Council at which he and four other recently retired members were presented with bronze plaques as memorials of their long and honourable service on the Faculty.

**MURDOCH C. MacLEAN, M.A.**

**M**URDOCH C. MacLEAN, Chief of the Social Analysis Branch of the Dominion Bureau of Statistics, met death by drowning on July 12th. In his passing the Bureau has lost the services of a man of unusual ability and qualifications. Mr. MacLean was born in Inverness, Cape Breton, on March

22, 1882, and attended the Halifax County Academy. He graduated from Dalhousie University and obtained an M.A. degree in 1906. Later he attended Harvard University, where he obtained his A.M. degree in 1911. He homesteaded near Mildred, Saskatchewan, teaching school part of the time.

He became school principal at Vegreville, Manitoba, and later classics teacher at Moose Jaw Collegiate Institute.

In 1914 he enlisted as a private in the 28th battalion. He was wounded at St. Eloi and later at Ypres and was invalided home in 1918. On returning to Canada he taught in the vocational school for returned men in Winnipeg. In 1919 he took over the direction of the Educational Statistics Branch in the Dominion Bureau of Statistics. The analytical insight which he displayed in his work in this field led to his appointment as Chief of the Social Analysis Branch in the Bureau, a posi-

tion which gave him the vast field of census statistics in which to apply his skill. A valuable series of monographs was prepared either by Mr. MacLean or under his direction, and these have furnished an interpretation of the Canadian statistics of democracy which have no equal. In the words of Dr. R. H. Coats, Dominion Statistician: "The series of monographs on the Seventh Census of Canada, which he planned and subsequently supervised, will, I am convinced, be more and more valued as years pass and its technique is appreciated. He created a new atmosphere in this type of work both in the Bureau of Statistics and beyond."

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## BOOKS AND REPORTS

**The Health Insurance Doctor.** By Barbara N. Armstrong. Princeton University Press, Princeton, N.J., 1939. 258 pages. \$3.00.

It is refreshing to read a book on health insurance in the preparation of which the author has done more than read the legislation and official documents on the subject. *THE HEALTH INSURANCE DOCTOR* is written by one who has made a life-long study of social insurance. It is the product of twenty years of research and teaching in the social-insurance field and first-hand investigations made in Great Britain, Denmark and France covering a six-month period in 1936. Representative areas were visited and the inquiry involved discussions with physicians as well as members of the administering bodies. Evidently therefore this book carries unusual authority. Written by a critical legal scholar and economist, it merits and will receive wide distribution and study.

Dr. Armstrong's objective is revealed by the title of the book. Basic information about the position of the health-insurance doctor abroad is pre-

sented. Those on this continent who regard health-insurance plans as unsuccessful socialized medicine should read this book to have their misconceptions dispelled. Many of the criticisms of health insurance are based on inaccurate or incomplete information. The work of the health-insurance doctor, his income, fees for services, patients served, measures of state control, paper work required, responsibility in prevention of malingering and what the physicians themselves think of the plan, are all ably reviewed.

For those unfamiliar with health insurance, a sketch of the scheme is given for each of the three countries covered (at the time the study was made). All three plans preserve the fundamentals of private-practice relationships. The precept that "knowledge by the doctor that his income will suffer if he fails to satisfy his patients provides a sound disciplinary element" and the "free-choice" theory that selection of the doctor gives the patient "a confidence in his physician which has definite therapeutic values", are both accepted as essential. In each

country the organized medical profession plays a prominent part in the health-insurance program as it affects the doctor's privileges, responsibilities and remuneration. In all three schemes the physician's responsibilities include certification of capacity or incapacity for work, a duty accepted as essential and inevitable.

In Denmark, with nearly fifty years of health-insurance experience, both the worker and his family are guaranteed both hospitalization and medical care. The British scheme is just as effective as far as it goes but the worker's family is not covered and the medical benefit is limited to general practitioner's service. In France the insured and his family are protected to a limited extent on a partial reimbursement basis. France and Denmark include agricultural workers, Great Britain does not.

The chief other points of difference among the three plans lie in the method of payment of the practitioners. In Great Britain he is paid on a capitation basis from a government pool. In Denmark the basis is partly fee and partly capitation through the funds of local insurance societies. In France the payment is essentially on a fee basis, collection being primarily through the patients themselves who have a right to partial reimbursement from the insurance funds.

Since the physician is the one around whose position in health-insurance schemes the chief controversies have been waged in America, the factual discourse on the various elements of this position clarifies many issues. Not only that, but the text explodes some fixed bogies, highly touted on this continent by the opponents of progressive social insurance for health. "Most physicians in the health-insurance countries surveyed stress the fact that health insurance has greatly improved the practitioner's chance of preventing the invalidity of his patient"—and further, a better and steadier income has resulted.

The author has done a real public

service in preparing this book. The fresh, clear type bespeaks familiarity with the facts. The scope of the material is limited, it does not give a detailed picture of the three schemes involved, but then that was not the objective.

A. Hardisty Sellers

### **Supervision in Public Health Nursing.**

By Violet H. Hodgson. *The Commonwealth Fund*, 41 East 57th St., New York, 1939. 362 pages. \$2.50.

THIS book has come in answer to a widely recognized need. The author, out of a wealth of varied experience and a vigorous devotion to her profession and her generation, has written a text book which promises long to remain an authority in its field.

The purpose of supervision in any field is the improvement of the service through the growth of the staff members. Mrs. Hodgson indicates the development of public health nursing as an integral part of the public health movement, never as an entity. The need for and contribution of supervision and the utilization of the supervisory process in improving the quality of service are made manifest. The underlying philosophy is expressed with admirable clarity and each procedure described is related to it.

The democratic principles of organization and administration are affirmed and each method advocated is in harmony with these basic principles.

Medical officers of health will find chapters five and six on organization and administration particularly interesting and helpful. The responsibility to the people of the community for adequate health service that rests upon the official health authorities is not allowed to pale throughout the book and the important place of public health nursing is shown against this background in every chapter.

The teaching function of supervision is discussed in chapters seven and eight under the headings: principles and methods. The laws of learning are examined and applied to the public

health nursing field. Methods are presented in the development of procedures and in problem-solving. An example of problem solving in the field of tuberculosis nursing adds value to the chapter.

Personnel managers as well as public health nurses will find the chapter dealing with industrial services useful. In this branch of nursing the author has had extensive experience and her book *PUBLIC HEALTH NURSING IN INDUSTRY* was published a few years ago.\*

The temptation to quote is strong but must be resisted because of space limitations. The book contains several charts and numerous diagrams; these are simple and accomplish their purpose. It is set in clear type and is well indexed and documented. Directors and supervisors in the public health nursing field will use *SUPERVISION IN PUBLIC HEALTH NURSING* as a reference, for having read it a return to this chapter and that one is inevitable.

Edna L. Moore

#### **Health in Relation to Occupation.**

By H. M. Vernon. Oxford University Press, London, 1939. 345 pages. \$1.50.

THE influence of occupation on health is a subject of particular interest to industrial workers, and to the health and productivity of the nation. An examination of the mortality records issued every ten years by the Registrar-General of England and Wales shows the variations which exist in different occupational groups, the rate of some being several times greater than the rates of the healthiest groups. Such figures would suggest that the character of occupation is of very great importance. The Registrar-General, however, in the Decennial Supplement for 1921 maintained that "the effect of occupation upon male mortality is probably, on the whole, more indirect than direct—that mortality is influenced more by the conditions of life implied by various occupations than by

the direct occupational risks entailed."

In this book the above claim is examined. The evidence shows that, generally, ill-health is due only in moderate degree to the direct effects of occupation. The problem is complex, involving other important factors, namely, heredity and social environment, including nutrition. In an attempt to estimate the relative degrees of importance in industrial life of the three factors, heredity, occupation and social environment, the author makes an intensive detailed survey. He discusses his findings in the following chapters: the improvement in the health of the nation, the extent of ill-health, heredity and environment, the nutritional requirements for healthy life, the effects of inadequate nutrition, the economic factor, mortality in relation to occupation, sickness in relation to occupation, invalidity from accidents and from psychological disorders, and the health of women in relation to occupation.

In the last chapter the author summarizes the evidence. After a brief treatment of the three factors, in which he takes into considerable account the effect of heredity on intelligence, he presents a table showing the relative influence of each factor on health, reckoned as percentages. This assessment attributes considerably less influence to the direct effect of occupation than to heredity and social environment. He then suggests steps needed to improve the general health by prevention of disease. He stresses the importance of a thoroughly efficient medical service for the nation, by means of which everyone can obtain the best advice and treatment, and in addition a thoroughly adequate industrial medical service as a means of improving occupational conditions.

This volume is well written and arranged. The vast amount of information presented is supplemented by numerous charts and graphs and will prove valuable to all interested in this aspect of preventive medicine.

\*Macmillan Company, 1933, \$1.75.

## INDUSTRIAL HYGIENE ABSTRACTS

### Industrial Health in Wartime

THIS timely article reviews with some misgivings the present situation in Great Britain as regards working hours and conditions in the war industries. Lessons from the Great War and other studies are drawn on to prove that, with respect to women particularly, greater production is achieved by limiting the number of work hours to 55 or less and ensuring one rest day a week. Longer hours, 60 to 75 a week, produced much fatigue and ill-health, with a great rise in the tuberculosis death-rate. For various reasons long working hours had less effect on the health of men but their efficiency was greater on a 55-hour week.

H. M. Vernon, *Brit. M.J.*, July 6, 1940, p. 25.

### Physiology and Aviation

IN this editorial, attention is drawn to the increased importance of various effects of flying owing to the rapid development of aviation. Since the Great War the science of aviation has developed to such an extent that old problems have assumed greater importance and new ones have been developed. The aeroplane of today is speedier, more manoeuvrable, and has a greater range of flight than its predecessor. As a result, such factors as altitude, temperature, noise, light, vibration, etc., require serious consideration. New standards for fitness in aviators have had to be established, as well as better methods for meeting dangerous conditions. Reference is made to the development of the parachute and the attendant physiological disturbances. This is now being studied as a special problem.

A Flying Personnel Research Com-

mittee has been set up by the British Government to investigate many of these problems, especially those connected with the more efficient supply of oxygen at high altitudes, disturbances of vision, the ill effects of sounds, fatigue and strain, and the examination standards for candidates for the flying corps.

The more important disturbances of physiological function incident to flying, and particularly in relation to their causes, are discussed briefly under the following headings: effects of altitude, effects of cold, effects of speed, effects of light, effects of vibration and effects of flight on the ear.

Acute altitude sickness, known as "air-sickness," which is due to decreased partial pressure of oxygen is a common complaint of civilian passengers. Chronic altitude sickness also due to lack of oxygen, may be more serious.

Under the influence of cold there is a graduated loss of efficiency. Increased metabolism and muscular restlessness which accompany chilly sensations progress to more serious conditions, ending finally in death at temperatures of  $-25$  to  $-50^{\circ}\text{F}$ .

Excessive speed might produce deleterious results, particularly if the body is in a horizontal position, as with observers and photographers and possibly gunners and bombers.

The conditions that most affect the ear are changes in barometric pressure during ascent and descent, noise and possibly vibration.

Reference is also made to the best diet for aviators. As the chief requisite is to maintain bodily heat and energy, carbohydrates have the greatest value. A recommended diet is given.

C.M.A.J., 1940, 43: 576.

